ORDER NO. MD0410497C1
A6

Service Manual

CD Stereo System

COMPACT disc DIGITAL AUDIO

SA-AK330P
SA-AK330PC

Colour
(K)... Black Type (For P/PC)
(S)... Silver Type (For P only)

Remote Control SB-AK330 SA-AK330 SB-AK330

Specifications

n AMPLIFIER SECTION

FTC output power	
THD 10%, both channels driven	
100 Hz - 3 kHz	
(Low channel)	64 W per channel (5 Ω)
3 kHz -10 kHz	
(High channel)	60 W per channel (5 Ω)
Total Bi-Amp power	248 W
RMS output power	
THD 10%, both channels driven	
1 kHz,	
(Low channel)	90 W per channel (5 Ω)
10 kHz,	
(High channel)	90 W per channel (5 Ω)
Total Bi-Amp power	360 W

n FM/AM TUNER, TERMINAL SECTION

Preset station	FM 15 stations
	AM 15 stations
Frequency Modulation (FM)	
Frequency range	
	87.9 - 107.9 MHz (200 kHz steps)
	87.5 - 108.0 MHz (100 kHz steps)
Sensitivity	2.5 µV (IHF)
S/N 26 dB	2.2 µV
Antenna terminal(s)	75 Ω (unbalanced)
Amplitude Modulation (AM)	
Frequency range	520 - 1710 kHz (10 kHz steps)
Sensitivity	
S/N 20 dB (at 1000 kHz)	560 µV/m
Audio performance (Amplifier)	
Input sensitivity/Input impedance	
Aux	250 mV,14.7 kΩ
Phone jack	
Terminal	Stereo, 3.5 mm (1/8") jack

n CASSETTE DECK SECTION

Track system	4 track, 2 channel
Heads	
Record/playback	Solid permalloy head
Erasure	Double gap ferrite head
Motor	DC servo motor
Recording system	AC bias 100 kHz
Erasing system	AC erase 100 kHz
Tape speed	4.8 cm/s (1 7/8 ips)
Overall frequency response (+3 dB, -6 dB at DECK OUT)	
NORMAL	35 Hz - 14 kHz
S/N	50 dB (A weighted)
Wow and flutter	0.18 % (WRMS)
Fast forward and rewind time	Approx. 120 seconds with C-60 cassette tape

n DISC SECTION

Discs played [8 cm (3") or 12 cm (5")]
(1) CD-Audio (CD-DA)
(2) CD-R/RW (CD-DA, MP3 formatted discs)
(3) MP3

Panasonic

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Bit rate	
MP3	32 kbps - 320 kbps
Sampling frequency	
MP3	32 kHz, 44.1 kHz, 48 kHz
CD	44.1 kHz
Decoding	16 bit linear
Digital filter	8 fs
D/A converter	MASH (1 bit DAC)
Pickup	
Wavelength	780 nm
Beam Source	Semiconductor laser
Audio output (Disc)	
Number of channels	2 (Stereo) (FL,FR)

n GENERAL

Power Supply	AC 120 V, 60Hz
Power consumption	238 W
Power consumption in standby mode	0.38 W
Dimensions (W x H x D)	250 x 330 x 341 mm (9 27/32" x 13" x 13 7/16")
Mass	7.1 kg (15.7 lb.)
Operating temperature range	+5 to +35°C (+41 to +95°F)
Operating humidity range	5 to 90% RH (no condensation)

n SYSTEM

SC-AK330 (P)	Music center: SA-AK330 (P)
	Speaker: SB-AK330 (P)
SC-AK330 (PC)	Music center: SA-AK330 (PC)
	Speaker: SB-AK330 (P)

Notes:

1. Specifications are subject to change without notice. Mass and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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1 Safety Precaution

(This “Safety Precaution” is applied only in U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer’s recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

1.1. Insulation Resistance Test

1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumper AC plug and each exposed metal cabinet part, such as screwheads, antenna, control shafts, handle brackets, etc.Measure the resistance value with ohmmeter between the jumper AC plug and each exposed metal cabinet part, such as screwheads, antenna, control shafts, handle brackets, etc.
   Equipment with antenna terminals should read between 2.7MΩ and 3.9MΩ to all exposed parts*. (Fig.1)
   Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig.2)
   *Note : Some exposed parts may be isolated from the chassis by design. These will read infinity.
4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and re-checked before it is returned to the customer.

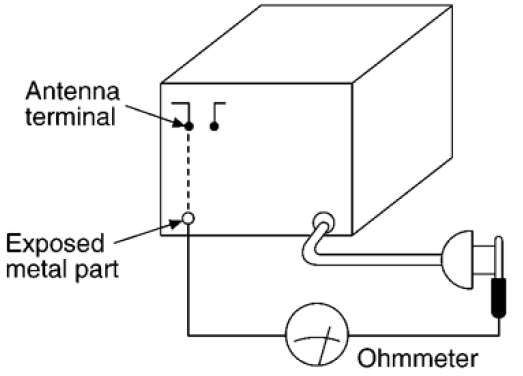


Fig.1

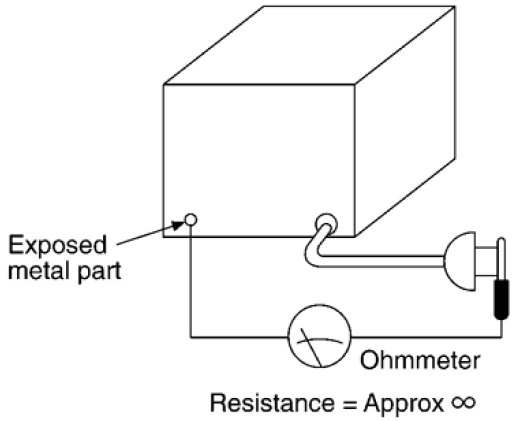


Fig.2

1.1.1. Caution for fuse replacement

(For English)
CAUTION:

Replace with the same type fuse:
(Manufacturer: LITTELFUSE, INC, Type: F1, 4A, 125V)

(For Canadian French)
ATTENTION:

Utiliser un fusible de rechange de même type:
(Manufacturer: LITTELFUSE, INC, Type: F1, 4A, 125V)

2 Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C5820 and C5840 through a 10Ω, 5W resistor to ground.
DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.
After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

Current consumption at AC 120V, 60 Hz in NO SIGNAL mode (volume min at CD mode) should be ~500mA.

3 Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.
If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

Note :
When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

4 Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor “chip” components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equiped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equiped with ES devices, place the assembly on a conductive surface such as aluminium foil, to prevent electrostatic charge build up or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder remover device. Some solder removal devices not classified as “anti-static (ESD protected)” can generate electrical charge to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminium foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize body motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are imporant for safety.
These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

5 Handling the Lead-free Solder

5.1. About lead free solder (PbF)

Distinction of PbF P.C.B.:

P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.

Caution:

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a high temperature soldering iron. In case of soldering iron with temperature control, please set it to 700 ± 20°F (370 ± 10°C).
- Pb free solder will tend to splash when heated too high (about 1100°F/600°C).
- When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.

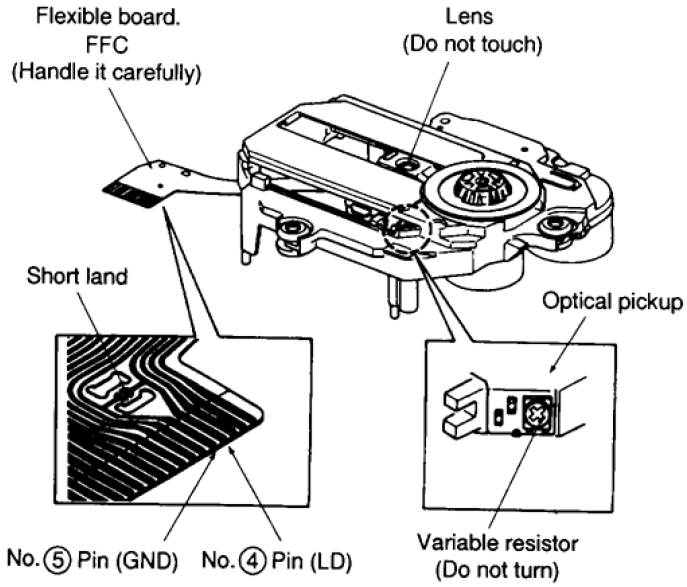
6 Handling Precautions For Traverse Deck

The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body.

So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

· Handling of traverse deck (optical pickup)

1. Do not subject the traverse deck (optical pickup) to static electricity as it is extremely sensitive to electrical shock.
2. To prevent the breakdown of the laser diode, an antistatic shorting pin is inserted into the flexible board (FFC board).
3. Take care not to apply excessive stress to the flexible board (FFC board). When removing or connecting the short pin, finish the job in as short time as possible.
4. Do not turn the variable resistor (laser power adjustment). It has already been adjusted.



Grounding for electrostatic breakdown prevention

1. Human body grounding

   Use the anti-static wrist strap to discharge the static electricity from your body.
2. Work table grounding

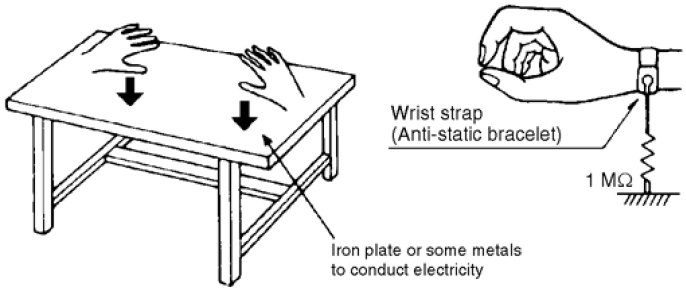
   Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is place, and ground the sheet.

Caution :

The static electricity of your clothes will not be grounded through the wrist strap. So, take care not to let your clothes touch the traverse deck (optical pickup).

Caution when replacing the Traverse Deck

The traverse deck has a short point shorted with solder to protect the laser diode against electrostatics breakdown. Be sure to remove the solder from the short point before making connections.



7 Precaution of Laser Diode

CAUTION:

This unit utilizes a class 1 laser.

Invisible laser radiation is emitted from the optical pickup lens.

Wavelength: 780nm

When the unit is turned on:

1. Do not look directly into the pick up lens.
2. Do not use optical instruments to look at the pick up lens.
3. Do not adjust the preset variable resistor on the pickup lens.
4. Do not disassemble the optical pick up unit.
5. If the optical pick up is replaced, use the manufacturer's specified replacement pick up only.
6. Use of control or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION!

THIS PRODUCT UTILIZES A LASER.

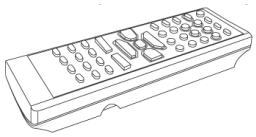
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

n Use of caution label (Except for U.S.A.)

CAUTION – INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. IEC60825-1 / Class 3b
VARNING – OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÅLEN.
ADVARSEL – USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.
ADVARSEL – USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.
VARO! AVATTAESSA OLET NÄKYMÄTÖNTÄ ALTTIINA LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VORSICHT – UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.
ATTENTION – RAYONNEMENT LASER INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.
注意 – 打开时有不可见激光辐射，避免激光束照射。
注意 – ここを開くと不可視レーザー光が出ます。 ビームを見たり、触れたりしないで下さい。

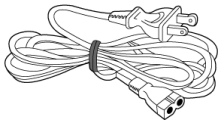
Inside of product

8 Accessories

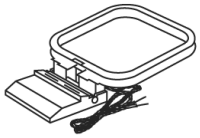


Remote Control

FM Antenna



AC Cord

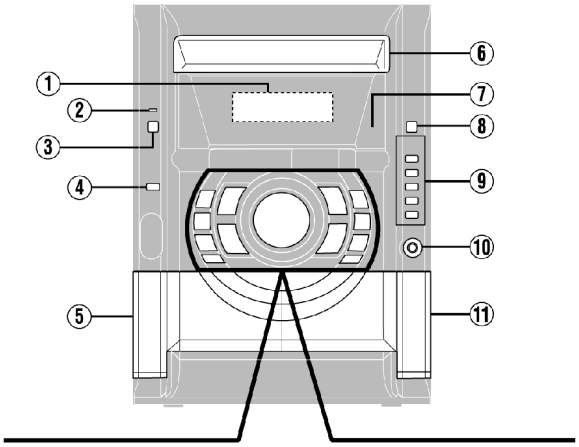


AM Loop Antenna

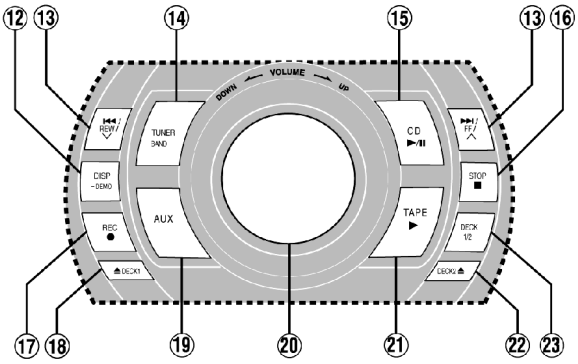
9 Operation Procedures

Front panel controls

Main unit



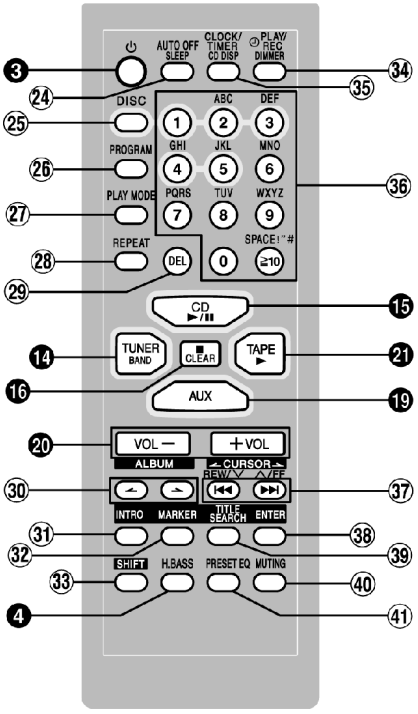
① **Display**
② **AC supply indicator [AC IN]**
This indicator lights when the unit is connected to the AC power supply.
③ **Standby/on switch [⏻/I, POWER]**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
④ **H.BASS button [H.BASS]**
⑤ **Deck 1 cassette holder**
⑥ **Disc tray**
⑦ **Remote control signal sensor**
⑧ **CD tray open/close button [⏏, OPEN/CLOSE]**
⑨ **CD direct play buttons [1 ~ 5]**
⑩ **Headphone jack [PHONES]**
⑪ **Deck 2 cassette holder**



Center console

⑫ **Display, demonstration button [DISP, –DEMO]**
⑬ **CD skip/search, tape fast-forward/rewind, tune/preset channel select, time adjust buttons [I◀◀/REW/∨, ▶▶I/FF/∧]**
⑭ **Tuner/band select button [TUNER, BAND]**
⑮ **CD play/pause button [▶/II, CD]**
⑯ **Stop/program clear button [■, STOP]**
⑰ **Record button [●, REC]**
⑱ **Deck 1 open button [⏏ DECK1]**
⑲ **AUX button [AUX]**
⑳ **Volume control [VOLUME DOWN, UP]**
㉑ **Tape play button [▶, TAPE]**
㉒ **Deck 2 open button [DECK2 ⏏]**
㉓ **Deck select button [DECK 1/2]**

Remote control



Buttons such as ❸ function in exactly the same way as the buttons on the main unit.

㉔ **Sleep timer + Auto off button [SLEEP, AUTO OFF]**
㉕ **Disc button [DISC]**
㉖ **Program button [PROGRAM]**
㉗ **Play mode select button [PLAY MODE]**
Use this for selecting CD play mode, tune mode, FM mode and deck select.
㉘ **Repeat button [REPEAT]**
㉙ **Delete button [DEL]**
㉚ **Album skip buttons [⌿ , ⌿ , ALBUM]**
㉛ **Intro button [INTRO]**
㉜ **Marker memory/recall button [MARKER]**
㉝ **Shift button [SHIFT]**
To use functions labeled in orange ※:
While pressing [SHIFT], press the corresponding button.
※ For buttons [AUTO OFF], [CLOCK/TIMER] and [⏲PLAY/REC]
㉞ **Dimmer + Play timer/record timer button [DIMMER, ⏲PLAY/REC]**
㉟ **CD display + Clock/timer button [CD DISP, CLOCK/TIMER]**
㊱ **Numbered, character buttons [≧10, 1–9, 0, A-Z, SPACE!"#]**
㊲ **CD skip/search, tape fast-forward/rewind, tune/preset channel select, time adjust, cursor buttons [I◀◀, REW/∨, ⌿ CURSOR, ▶▶I, ∧/FF, CURSOR ⌿]**
㊳ **Enter button [ENTER]**
㊴ **Title search mode select button [TITLE SEARCH]**
㊵ **Muting button [MUTING]**
㊶ **Preset EQ select button [PRESET EQ]**

Disc information

Disc selection

This unit can play MP3 and CD-DA (digital audio) format audio CD-R and CD-RW that have been finalized (a process that enables CD-R/CD-RW players to play audio CD-R and CD-RW) upon completion of recording.
It may not be able to play some CD-R or CD-RW due to the condition of the recording.

Disc type	Logo	Indication used in instructions
Audio CD	COMPACT disc DIGITAL AUDIO	CD
CD-R/RW	–	CD MP3 (Depending on the recording format ➡ see above)

Do not:

- use irregularly shaped discs.
- attach extra labels and stickers.
- use discs with labels and stickers that are coming off or with adhesive exuding from under labels and stickers.
- attach scratch proof covers or any other kind of accessory.
- write anything on the disc.
- clean discs with liquids. (Wipe with a soft, dry cloth.)
- use discs printed with label printers available on the market.

To prevent damage

Always observe the following points:

- Load only 1 disc on the tray.
- Always stop the changer before loading or changing discs. Do not change discs while a disc is playing.
- Set the system on a flat, level surface.
- Always unload all discs before moving the unit.

Do not:

- set the unit on top of magazines, inclined surfaces, etc.
- move the unit while a tray is opening/closing, or when loaded.
- put anything except a disc in the tray.
- use cleaning discs or discs which are badly warped or cracked.
- disconnect the AC power supply cord from the household AC outlet during disc changing operation.

MP3 information

This unit can play MP3 files recorded on CD-R/RW with a computer.
Files are treated as tracks and folders are treated as albums.
This unit can access up to 999 tracks, 255 albums and 20 sessions.

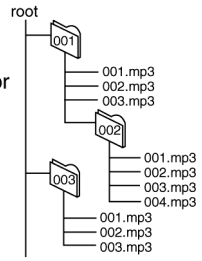
When making MP3 files to play on this unit

Disc format
Discs must conform to ISO9660 level 1 or 2 (except for extended formats).

File format
MP3 files must have the extension “.MP3” or “.mp3”.

To play in a certain order
Prefix the folder and file names with 3-digit numbers in the order you want to play them. Files may not be recorded in numbered order if the prefixes have different numbers of digits. For example: 1track.mp3, 2track.mp3, 10track.mp3. However, some writing software may also cause recording to occur in a different order.

Example:



MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

Limitations on MP3 play

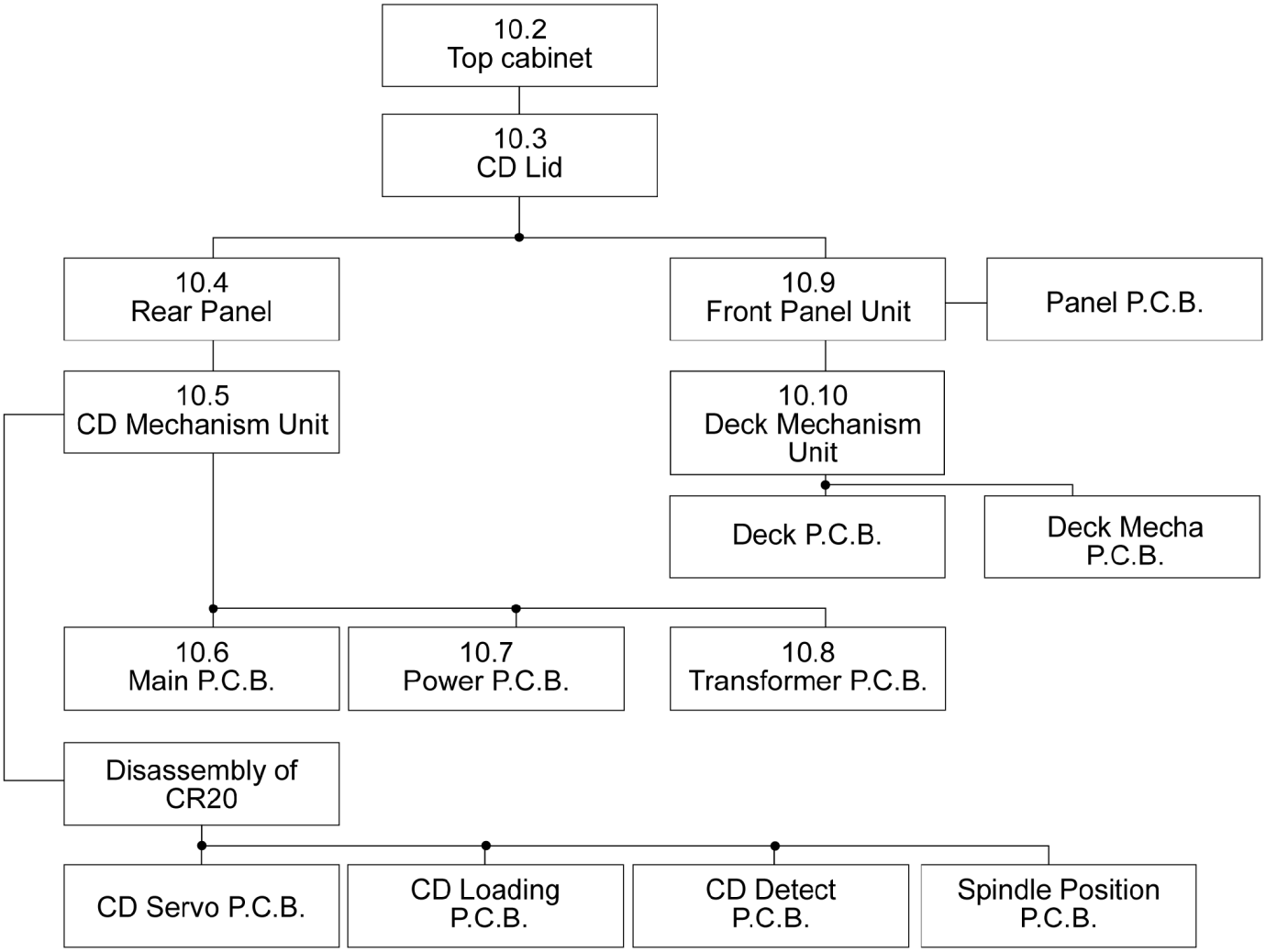
- This unit is not compatible with packet-write format.
- When both MP3 and CD-DA data is recorded on the disc over a number of sessions:
  - If the first session contains MP3 recordings, the unit will play from the MP3 made in that session till the session before the first CD-DA recordings.
  - If the first session contains CD-DA recordings, the unit will play only the recordings made in that session. The subsequent sessions will be ignored.
- Some MP3 may not be played due to the condition of the disc or recording.
- Recordings will not necessarily be played in the order you recorded them.
- Lower case letters will be displayed as upper case.

10 Disassembly and Assembly of Main Component

10.1. Disassembly flow chart

The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.

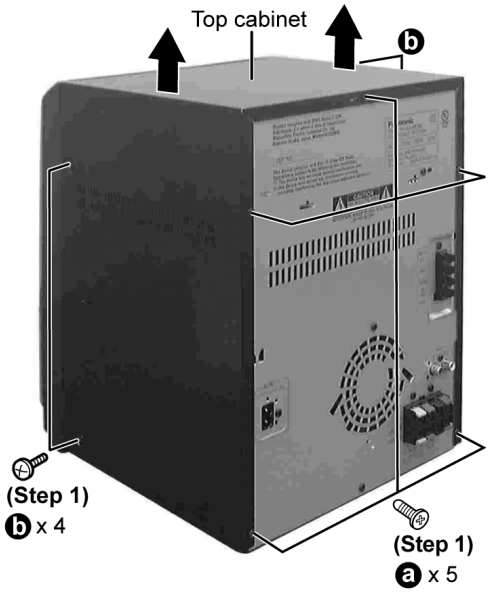
To assemble the unit, reverse the steps shown in the chart as below.



10.2. Disassembly of Top Cabinet

Step 1 Remove 2 screws at each side and 5 screws at rear panel.

Step 2 Lift up both sides of the top cabinet, push the top cabinet towards the rear and remove the top cabinet.



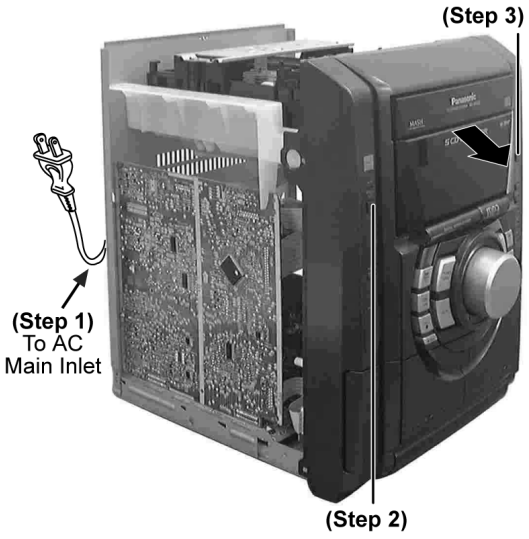
10.3. Disassembly of CD Lid

(The CD changer unit can be removed after the CD Lid is removed)

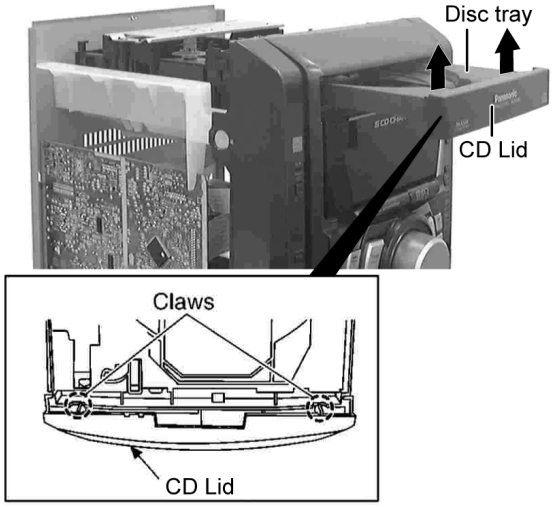
- Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet
- **Opening the disc tray automatically (Using Power Supply)**

Step 1 Connect the AC power cord.

Step 2 Press the POWER button to power up the main unit.

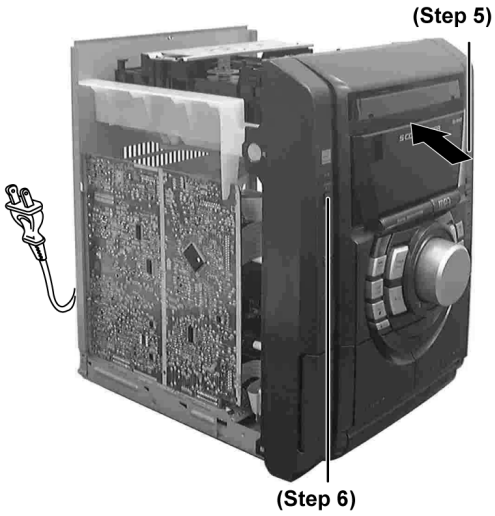


Step 3 Press the OPEN/CLOSE button, the disc tray will open automatically.



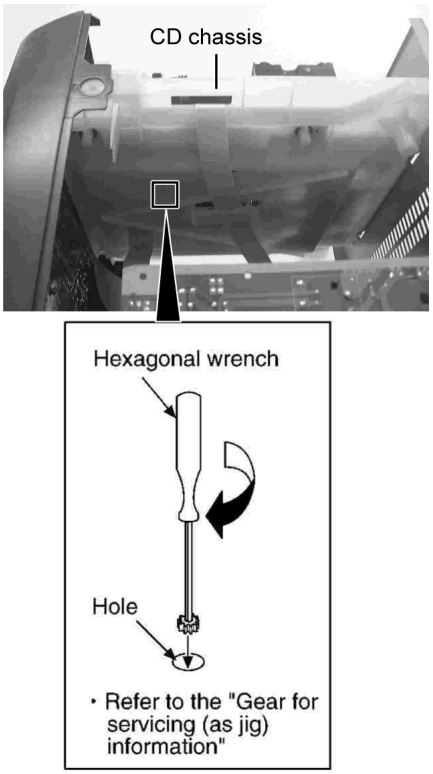
Step 4 Release the 2 claws, and then remove the CD Lid.

Step 5 Press the OPEN/CLOSE button, the disc tray will close.

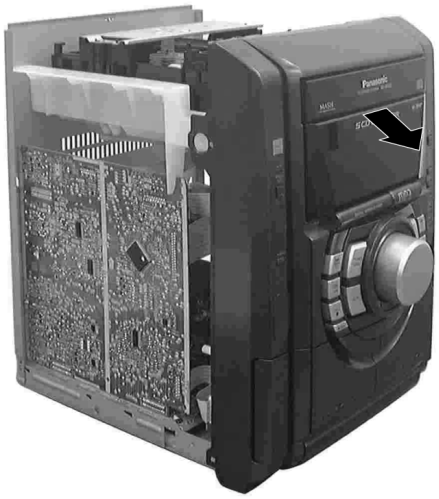


Step 6 Press the POWER button to turn the power off.

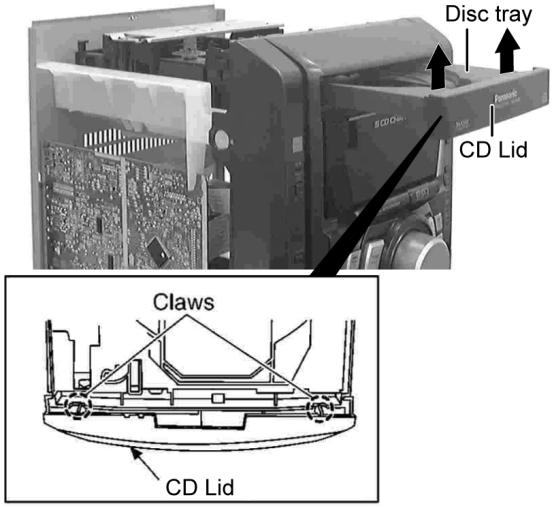
· **[Opening the disc tray manually (Using service tools)]**



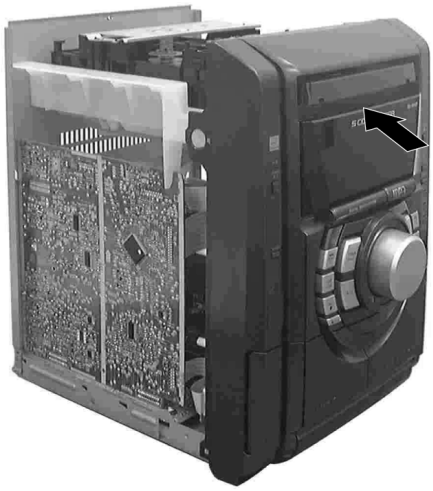
Step 1 Insert the gear tool into the hole on the underside of CD chassis and then rotate in the direction of arrow. The disc tray will be opened.



Step 2 Release the 2 claws, and then remove the CD lid cover.



Step 3 Repeat Step 2 but rotate the gear tools in anti-clockwise direction.

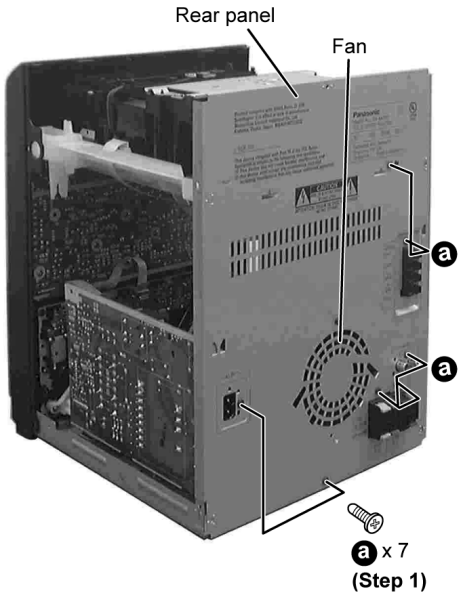


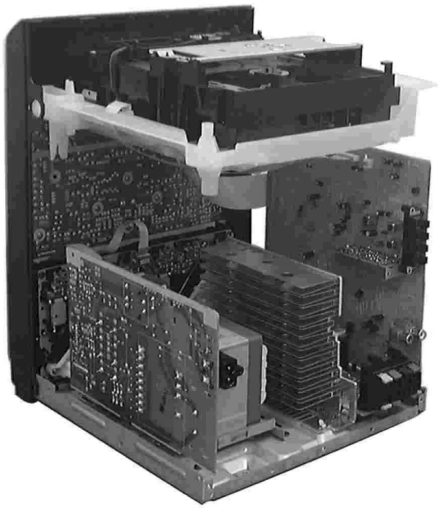
Step 4 The disc tray will be closed.

10.4. Disassembly of Rear Panel

・Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet

Step 1 Remove 7 screws and disconnect wire CN2810 (Fan) at rear cabinet as shown.



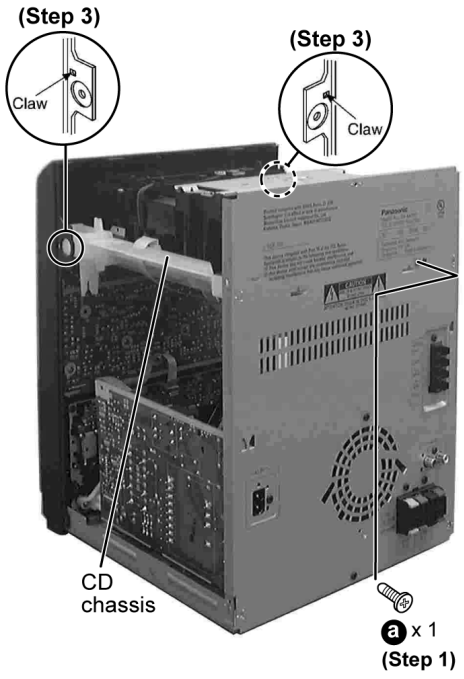


10.5. Disassembly of CD Mechanism Unit

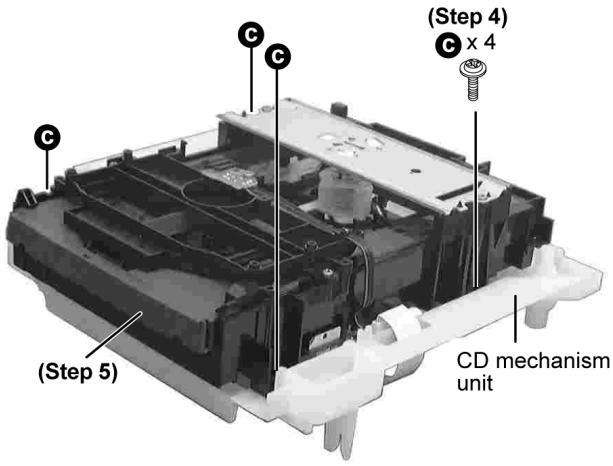
・Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet

Step 1 Remove one screw at rear panel.

Step 2 Detach the FFC wires (CN2801 & CN2805).



Step 3 Release the claws of both ends, and then lift up the CD Mechanism Unit.

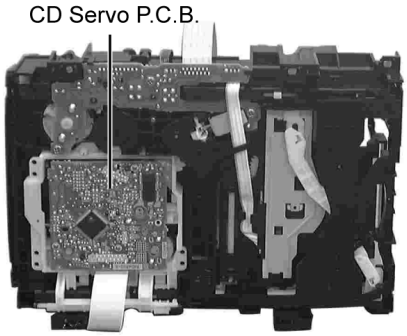


Step 4 Remove 4 screws.

Step 5 Remove the CD chassis.

Step 6 Lay the CD mechanism unit as shown.

・For disassembly of CD mechanism unit, please refer to Section 10.11 of this manual.

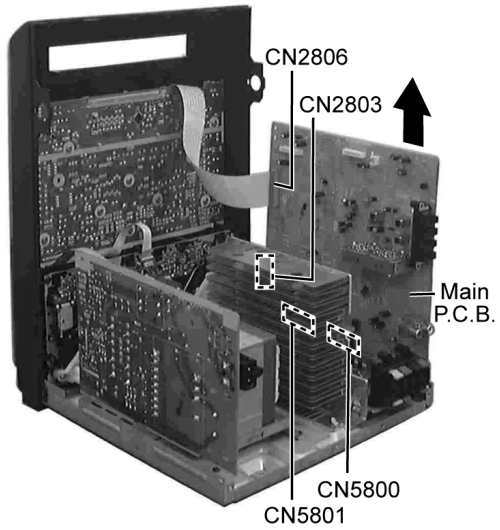


10.6. Disassembly of Main P.C.B.

- Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 6) of Item 10.3 - Disassembly of CD Lid
- Follow the (Step 1) of Item 10.4 - Disassembly of the Rear Panel
- Follow the (Step 1) - (Step 3) of Item 10.5 - Disassembly of the CD Mechanism Unit

Step 1 Disconnect FFC wires CN2803 & CN2806 from Main P.C.B.

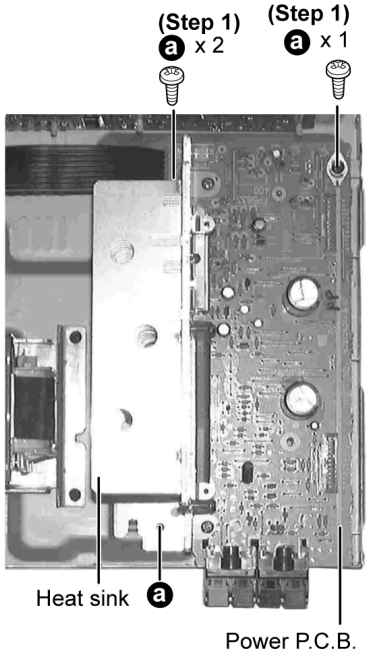
Step 2 Lift up Main P.C.B. by disconnecting connectors CN5800 & CN5801 as arrow shown above.



10.7. Disassembly of Power P.C.B.

- Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 6) of Item 10.3 - Disassembly of CD Lid
- Follow the (Step 1) of Item 10.4 - Disassembly of the Rear Panel
- Follow the (Step 1) - (Step 3) of Item 10.5 - Disassembly of the CD Mechanism Unit
- Follow the (Step 1) - (Step 2) of Item 10.6 - Disassembly of the Main P.C.B.

Step 1 Remove the 2 screws fixed at heat sink and 1 screw fixed at Power P.C.B..

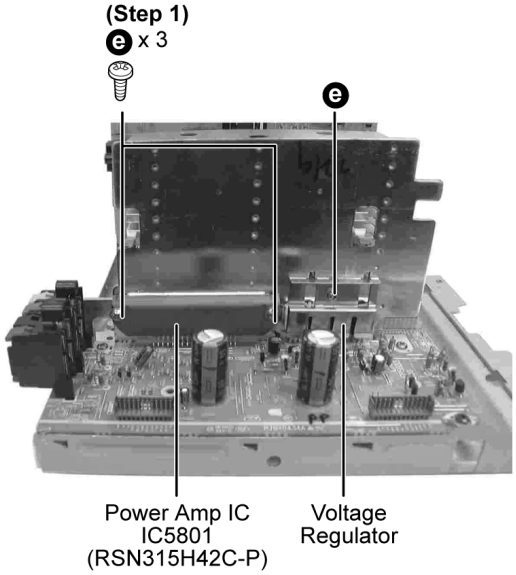


Note:

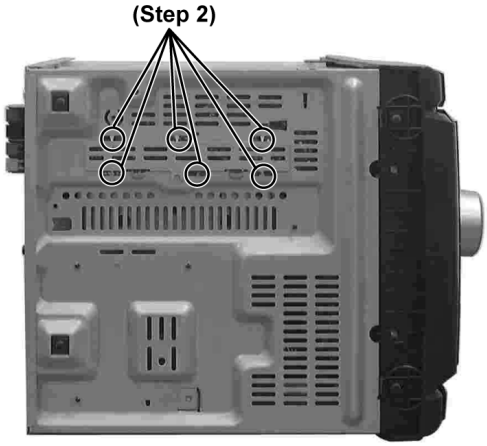
Insulate the Power P.C.B. with insulation material to avoid short circuit.

· **Replacement of the Power Amplifier IC/ Voltage Regulator**

Step 1 Remove 2 screws fixed to the Power Amplifier IC and 1 screw to Voltage Regulator.



Step 2 Break the joint with a metal cutter as shown below.



Step 3 Unsolder the terminals of Power Amp IC, transistor and replace the components.

Step 4 Fix back the cut portion with a screw as shown.

10.8. Disassembly of Transformer P.C.B.

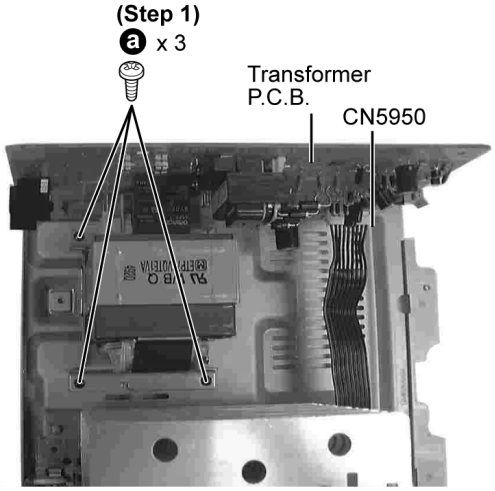
· Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet

· Follow the (Step 1) - (Step 6) of Item 10.3 - Disassembly of CD Lid

· Follow the (Step 1) of Item 10.4 - Disassembly of the Rear Panel

· Follow the (Step 1) - (Step 3) of Item 10.5 - Disassembly of the CD Mechanism Unit

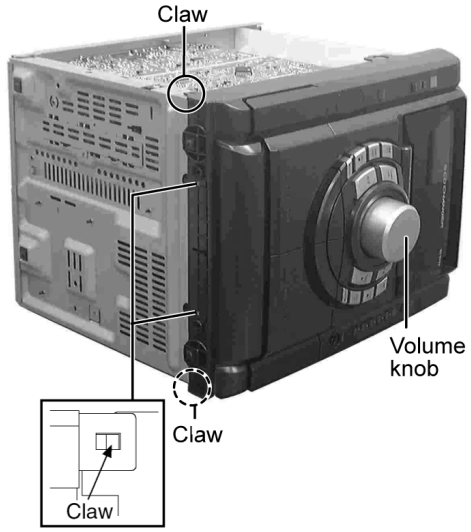
Step 1 Remove 3 screws, disconnect connector CN5950.



10.9. Disassembly of Front Panel Unit

- Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 6) of Item 10.3 - Disassembly of CD Lid
- Follow the (Step 1) of Item 10.4 - Disassembly of the Rear Panel
- Follow the (Step 1) - (Step 3) of Item 10.5 - Disassembly of the CD Mechanism Unit

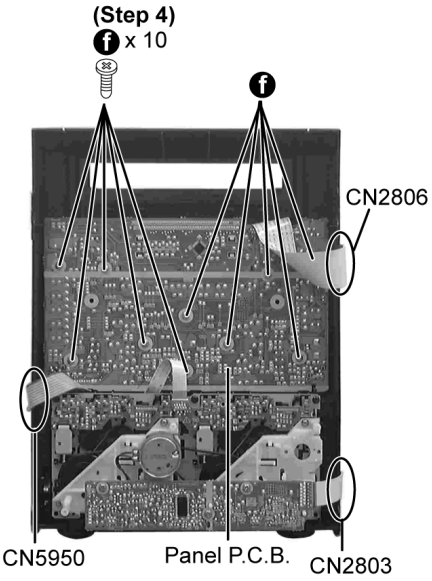
Step 1 Lay the unit as shown below.



Step 2 Release 2 claws at bottom and 2 claws each side, draw the front panel ass'y forward.

Step 3 Remove volume knob.

- **Disassembly of Panel P.C.B.**



Step 4 Remove the 10 screws.

Step 5 Disconnect connectors CN2806, CN2803 and CN5950.

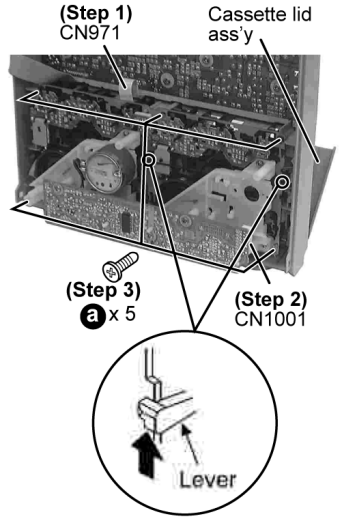
10.10. Disassembly of Deck Mechanism Unit

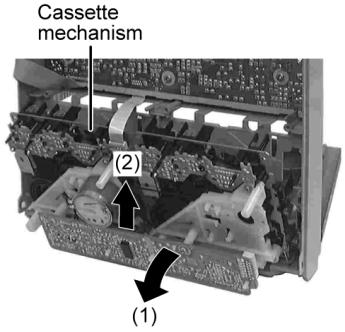
- Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 6) of Item 10.3 - Disassembly of CD Lid
- Follow the (Step 1) of Item 10.4 - Disassembly of the Rear Panel
- Follow the (Step 1) - (Step 3) of Item 10.5 - Disassembly of the CD Mechanism Unit
- Follow the (Step 1) - (Step 3) of Item 10.9 - Disassembly of the Front Panel Unit

Step 1 Detach FFC wire (at CN971).

Step 2 Disconnect FFC flat cable from the connector (CN1001).

Step 3 Remove the 5 screws.



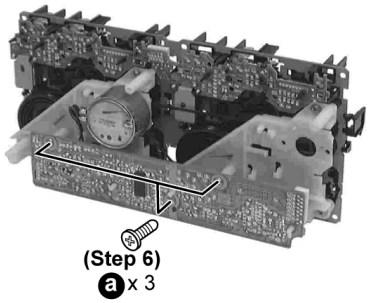


Step 4 Push the lever upward, and then open the cassette lid ass'y (For DECK1 and DECK2).

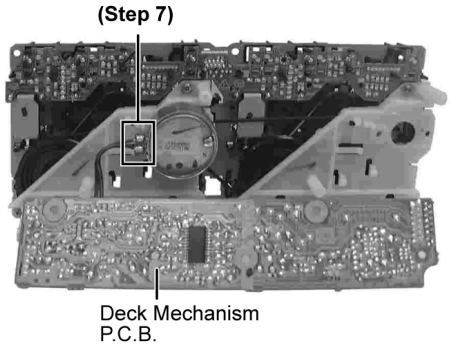
Step 5 Tilt the cassette mechanism unit in the direction of arrow (1), and then remove it in the direction of arrow (2).

- For replacement of Deck Mechanism P.C.B.

Step 6 Remove 3 screws.



Step 7 Unsolder the motor terminals.



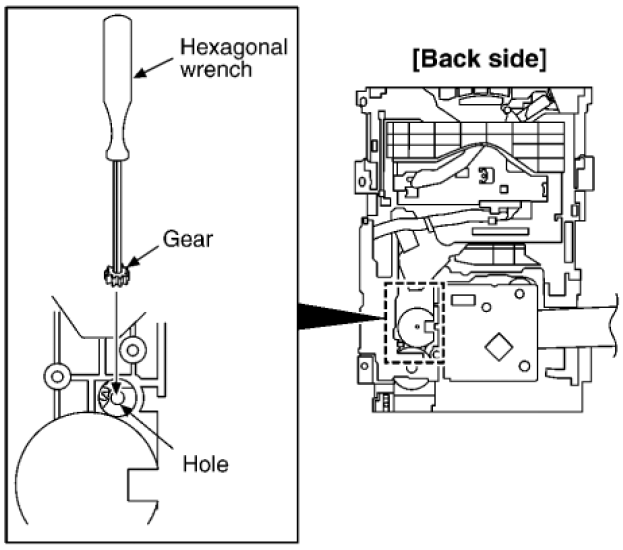
Step 8 Remove Deck Mechanism P.C.B.

10.11. CD Mechanism Main Component Replacement Procedures

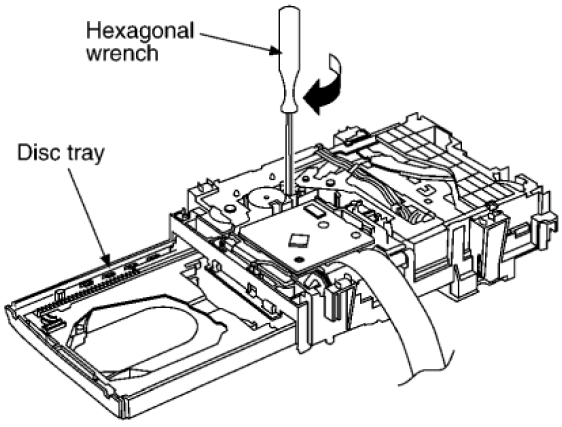
- Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 6) of Item 10.3 - Disassembly of CD Lid
- Follow the (Step 1) - (Step 6) of Item 10.5 - Disassembly of the CD Mechanism Unit

10.11.1. Replacement of the Traverse Deck

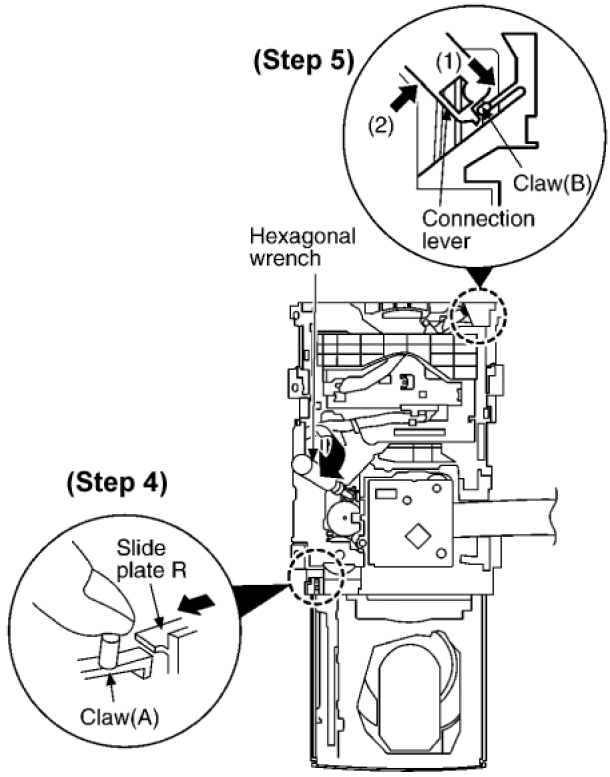
Step 1 Remove the CD changer unit.



Step 2 Insert the gear with hexagonal wrench into the hole.

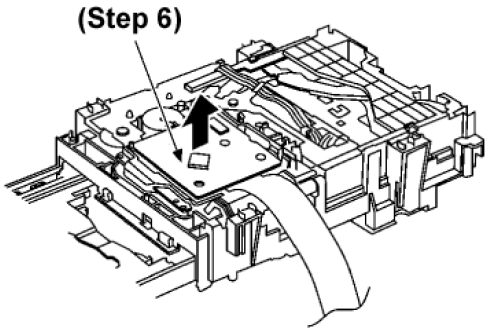


Step 3 Rotate the hexagonal wrench in the direction of arrow (clockwise), and then open the disc tray fully.

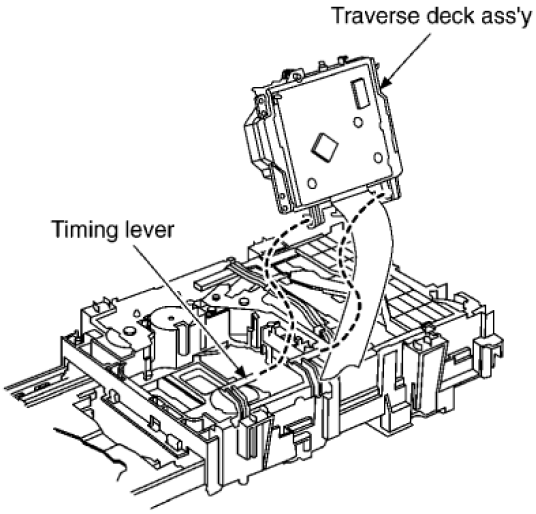


Step 4 With pressing the claw (A), rotate the hexagonal wrench clockwise. (The slide plate R moves for a little amount.)

Step 5 Pressing the claw (B) in the direction of arrow (1), the connection lever moves in the direction of arrow (2).



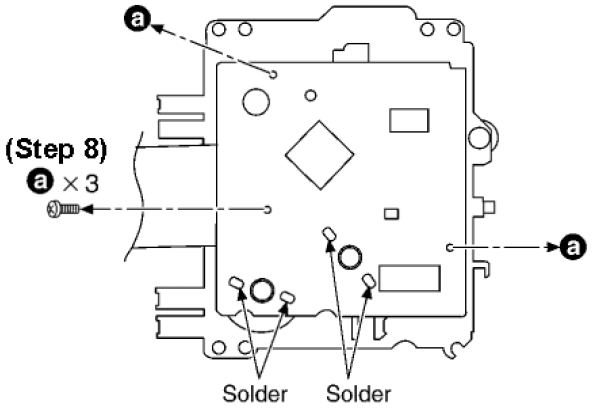
Step 6 Lift up the traverse deck ass'y.



Step 7 Remove the traverse deck ass'y from the timing lever.

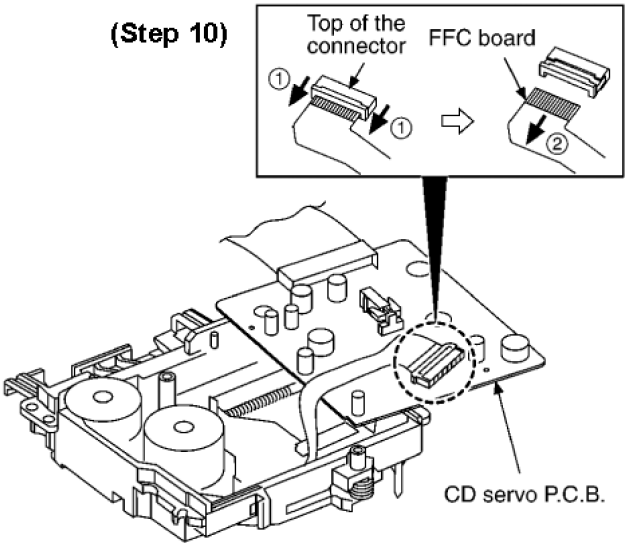
Caution:

When removing or inserting the traverse deck avoid touching the OPU lens and pressing onto the turntable.

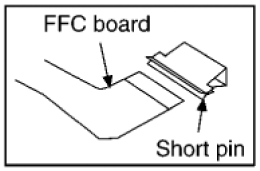


Step 8 Remove 3 screws.

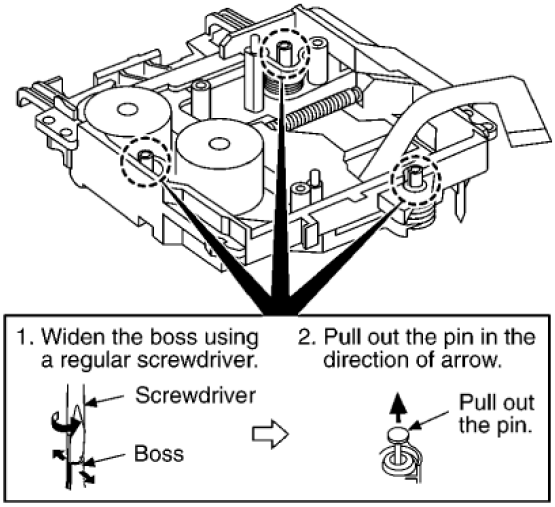
Step 9 Unsolder the motor terminals (4 points).



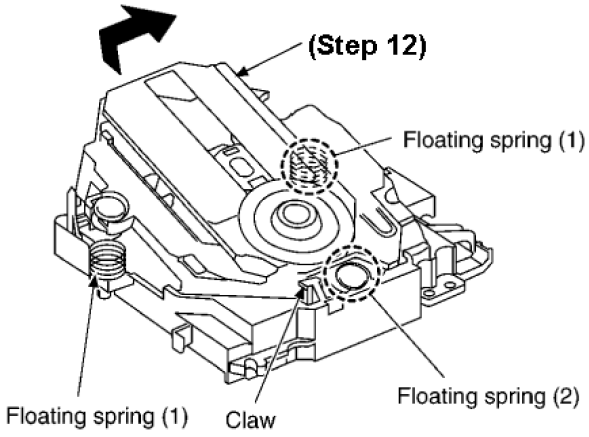
Caution:
Insert a short pin into the traverse unit FFC board.
(Refer to "**Handling Precautions for Traverse Deck**".)



Step 10 Remove the FFC board from the connector, and then remove the CD Servo P.C.B.


1. Widen the boss using a regular screwdriver.
2. Pull out the pin in the direction of arrow.
Screwdriver
Boss
Pull out the pin.

Step 11 Remove the pin.



Step 12 Release the claw, and then remove the traverse deck ass'y.

Note:

Be careful not to lose the 3 floating spring because those will also be removed on removal of the traverse deck ass'y.

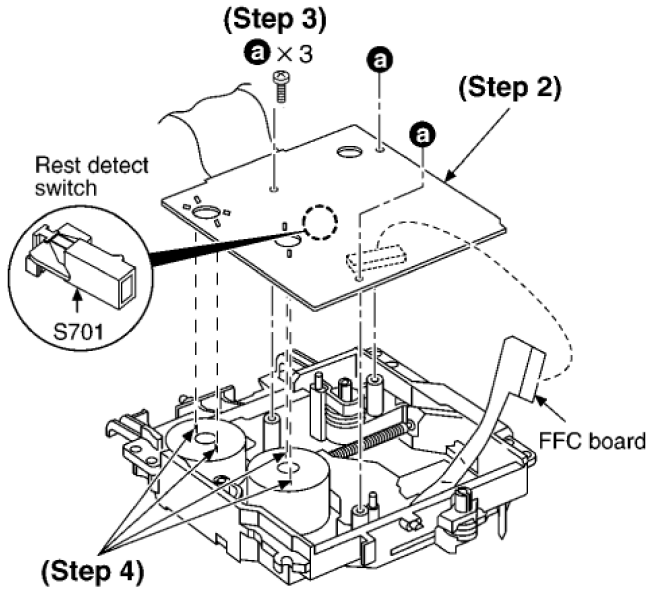
· Installation of the CD Servo P.C.B. after replacement

Step 1 Connect the FFC board.

Step 2 Install the CD servo P.C.B. in the traverse deck ass'y.

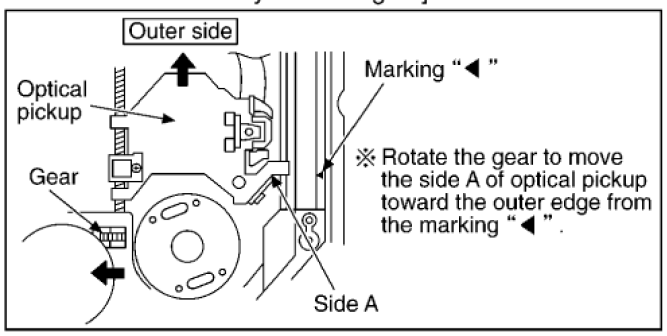
Step 3 Remove 3 screws.

Step 4 Solder.

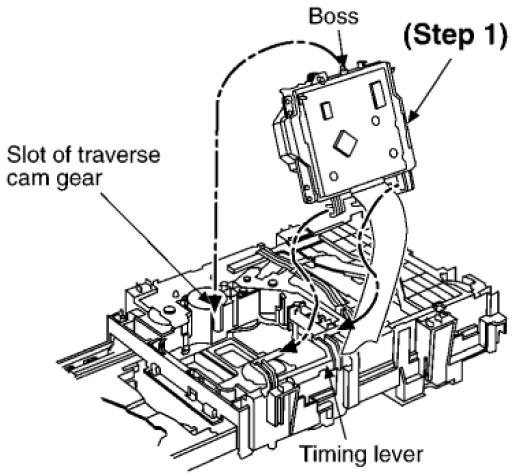


· Note for installation of the CD servo P.C.B.

Before installing the CD servo P.C.B., move the optical pickup toward the outer edge from the mark "◀".
[Otherwise, the rest detect switch (S701) mounted on the CD servo P.C.B. may be damaged.]

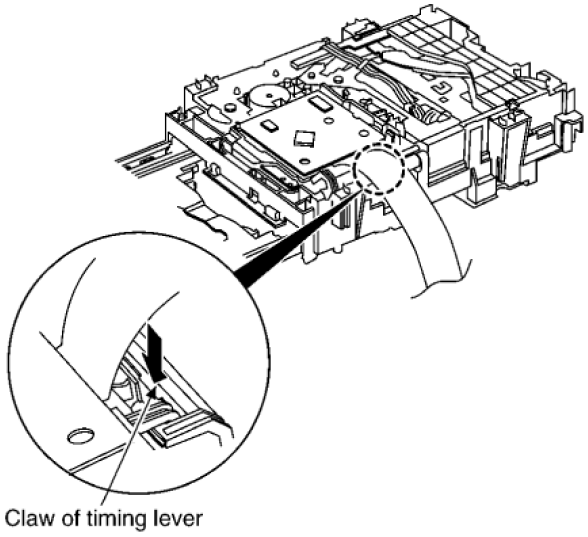

Outer side
Optical pickup
Marking "◀"
Gear
※ Rotate the gear to move the side A of optical pickup toward the outer edge from the marking "◀".
Side A

· Installation for traverse deck ass'y

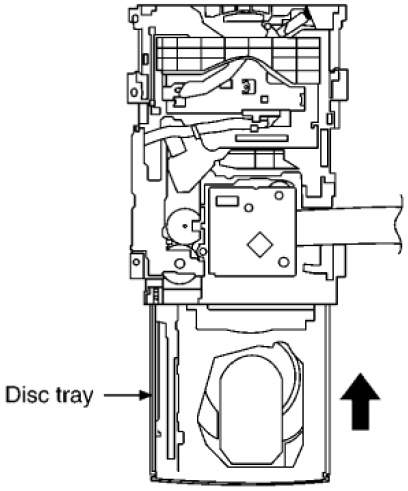


Step 1 Install the traverse deck ass'y to the timing lever.

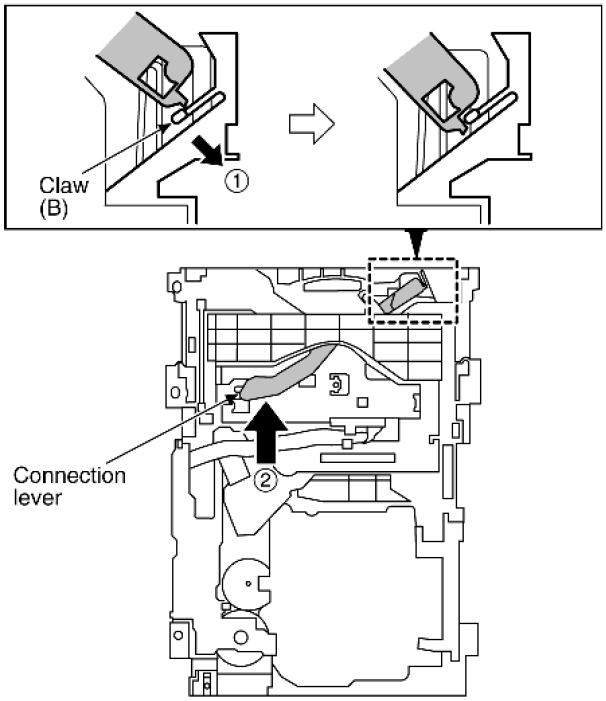
Step 2 Align the boss of traverse deck ass'y with the slot of traverse cam gear.



Step 3 Force the claw of timing lever.



Step 4 Force the disc tray fully.



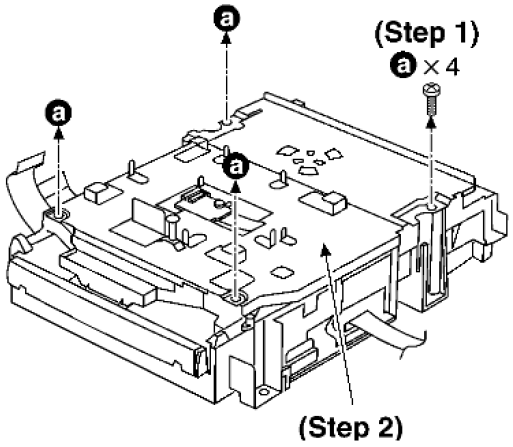
Step 5 With pressing the claw (B) in the direction of arrow (1), force the connection lever in the direction of arrow (2).

10.11.2. Replacement for the Disc Tray

Step 1 Remove 4 screws.

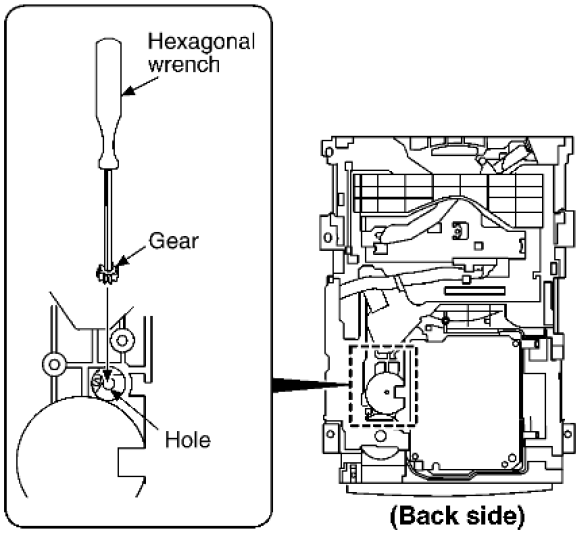
Step 2 Remove the upper plate.

Step 3 Remove 3 screws.

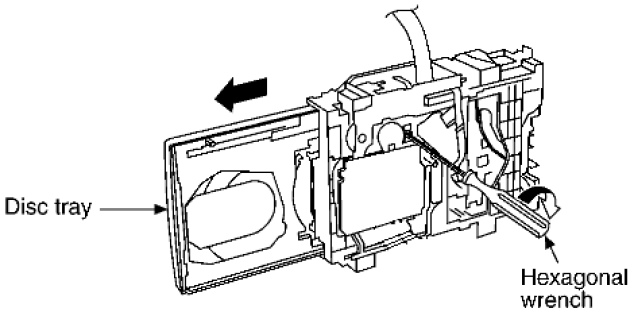


Step 4 With lifting the claw in the direction of (1), draw the CD Detect P.C.B. in the direction of arrow (2).

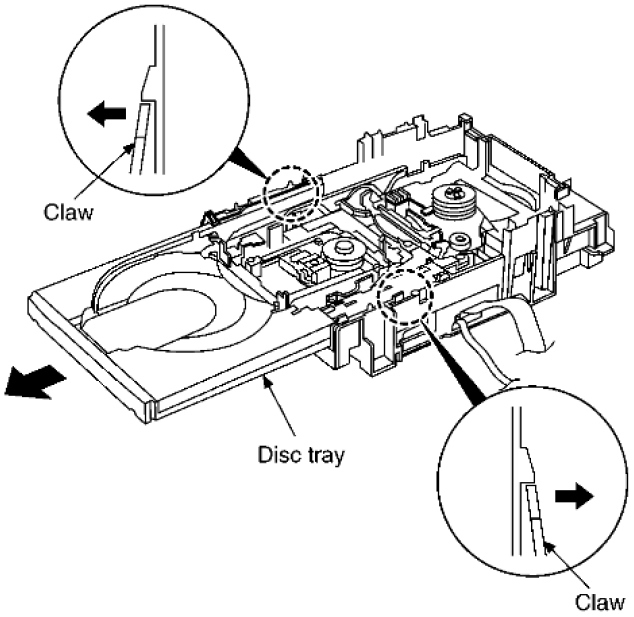
Step 5 Remove the mechanism cover.



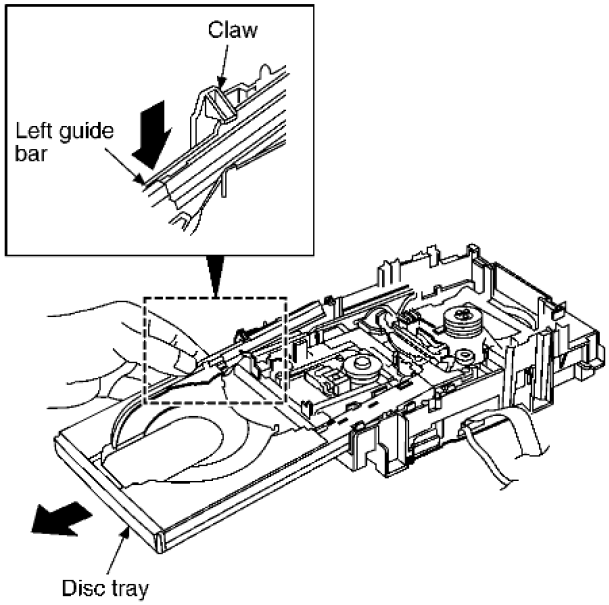
Step 6 Insert the gear with hexagonal wrench into the hole.



Step 7 Rotate the hexagonal wrench in the direction of arrow, and then open the disc tray fully.

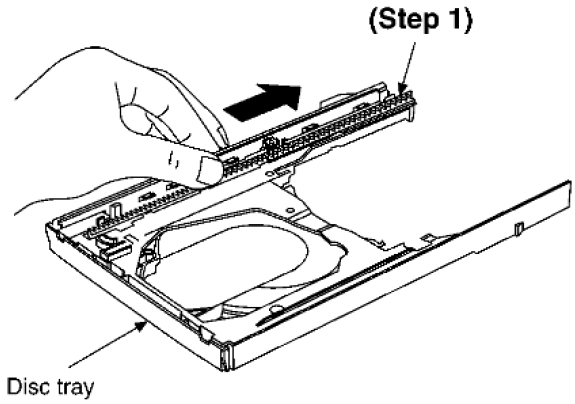


Step 8 Release the both claws, and then draw the disc tray.

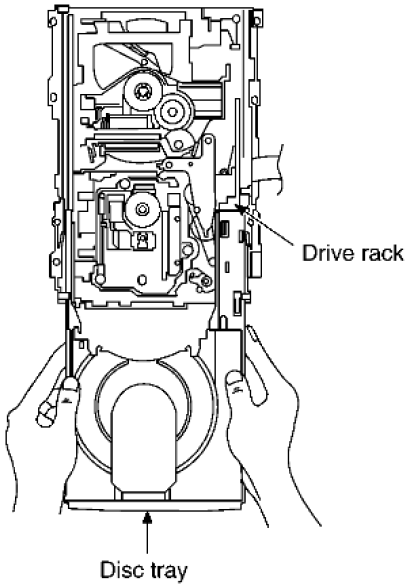


Step 9 With forcing the left guide bar manually because the left guide bar interfers with claw, draw the disc tray.

[Installation of the disc tray after replacement]

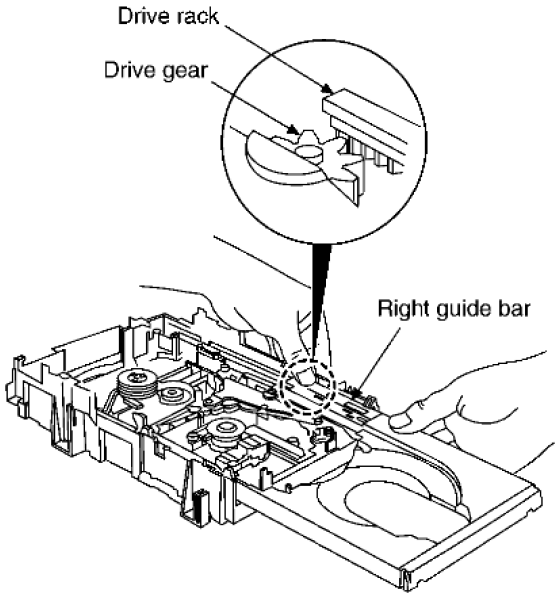


Step 1 Slide the drive rack fully in the direction of arrow.



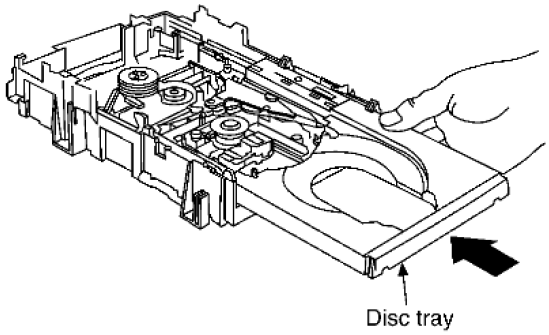
Step 2 Holding the drive rack not to move, install the disc tray.

Step 3 Align the drive rack with the drive gear.



NOTE:

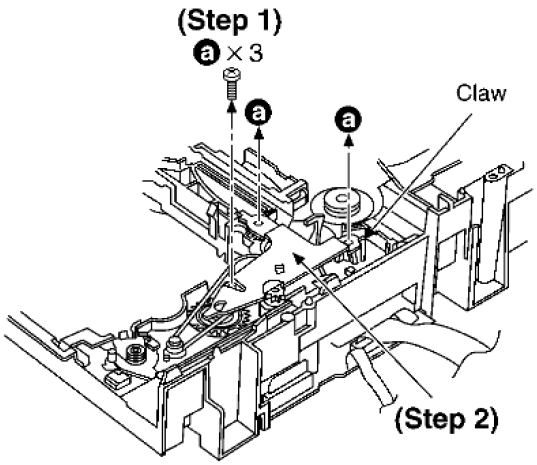
Force the right guide bar of tray base manually not to move upwards.



Step 4 Holding the disc tray manually, push the disc tray in the direction of the arrow.

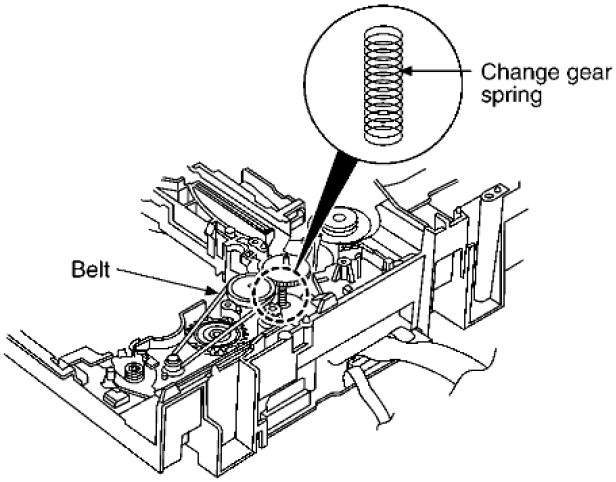
10.11.3. Disassembly and reassembly for mechanism base drive unit

Step 1 Remove 3 screws.



Step 2 Release the claw, and then remove the gear holder.

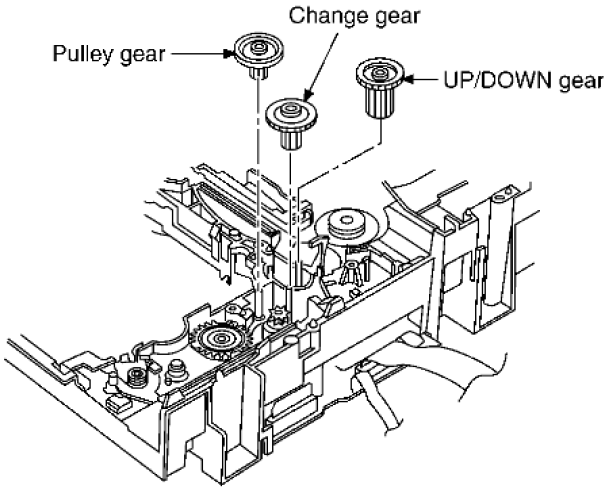
Step 3 Remove the belt and change gear spring.



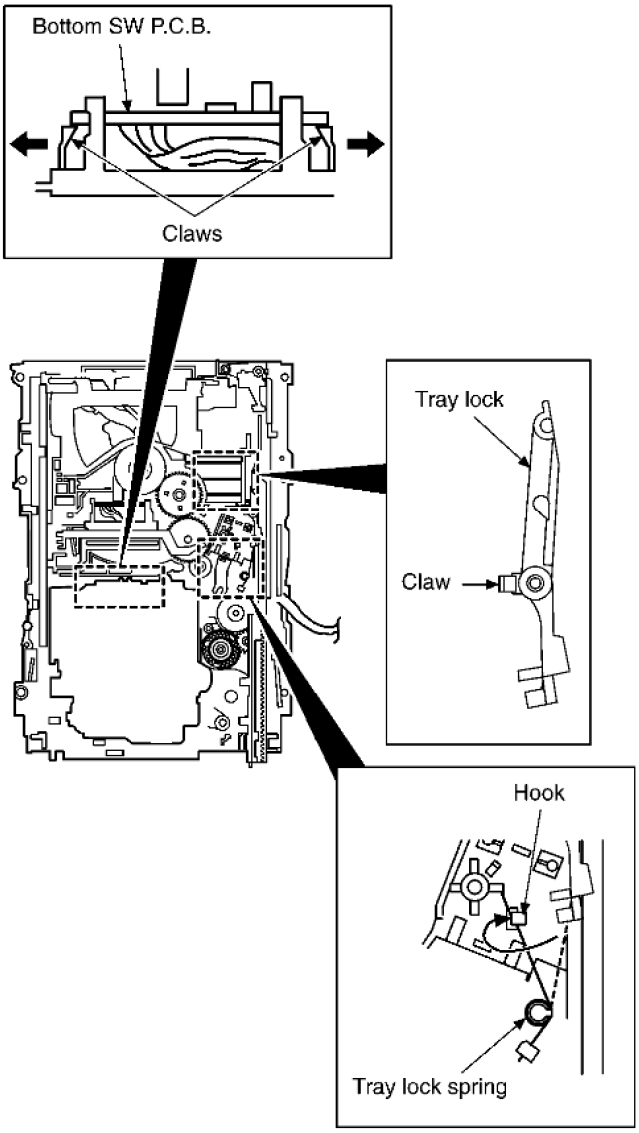
NOTE:

Take care not to lose the change gear spring.

Step 4 Remove the pulley gear, change gear and UP/DOWN gear.



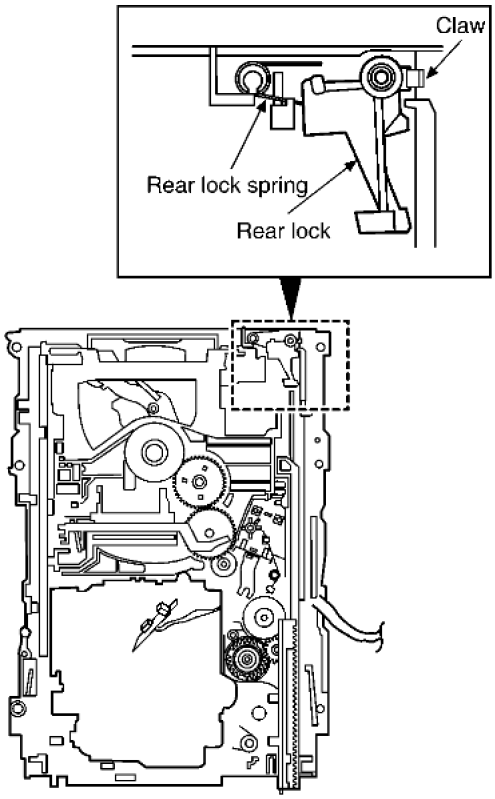
Step 5 Release the 2 claws, and then remove the bottom SW P.C.B..



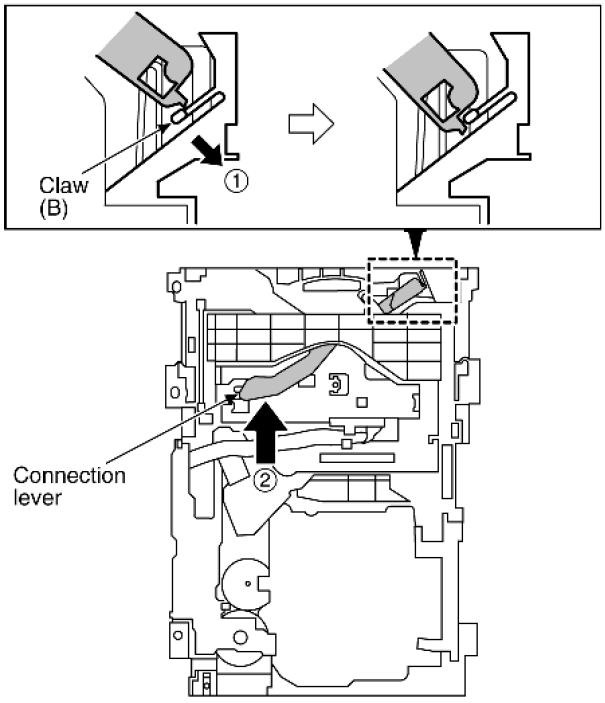
Step 6 Install the tray lock spring to hook temporary.

Step 7 Release the claw, and then remove the tray lock.

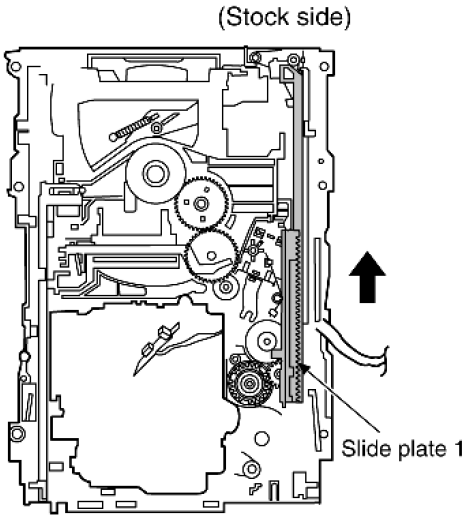
Step 8 Release the claw, and then remove the rear lock.



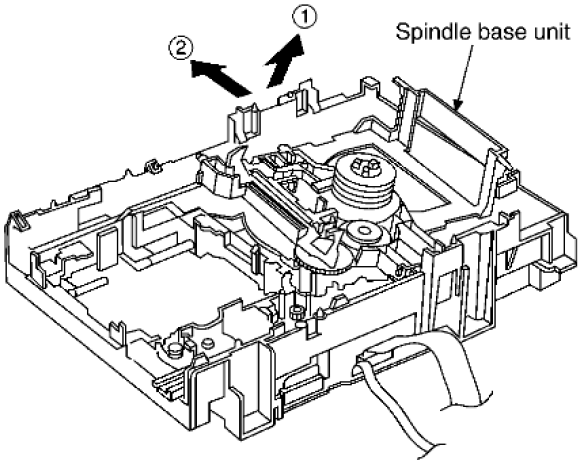
Step 9 Pressing the claw (B) in the direction of arrow (1), force the connection lever in the direction of arrow (2).

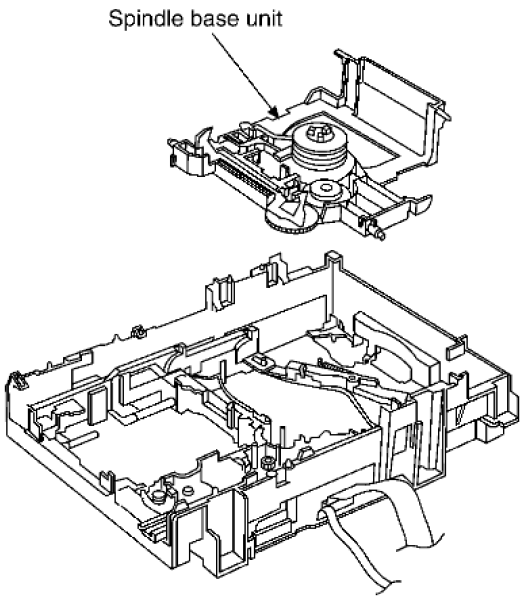


Step 10 Move the slide plate 1 to the end of stock side.

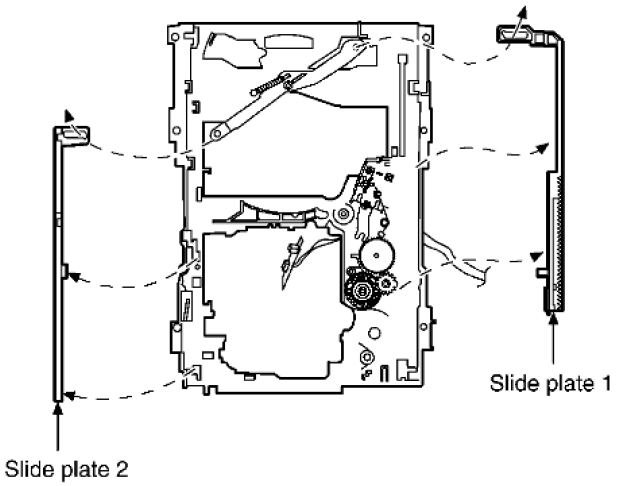


Step 11 Lift up the left end of spindle base unit in the direction of arrow (1), and then remove the unit in the direction of arrow (2).

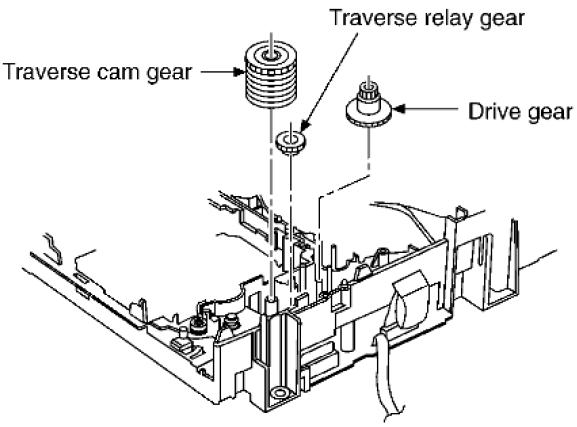




Step 12 Remove slide plate 1 and slide plate 2.

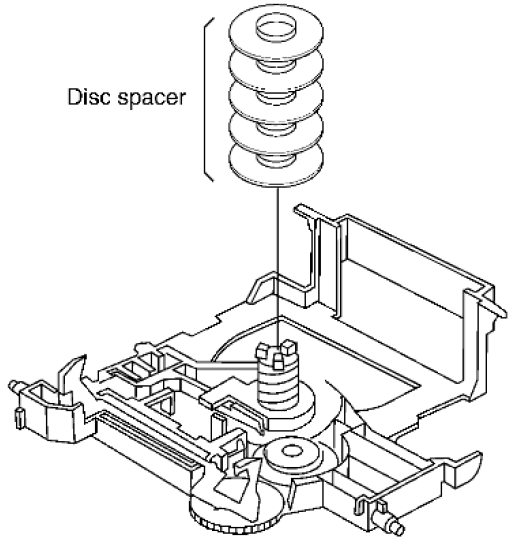


Step 13 Remove the traverse relay gear, traverse cam gear and drive gear.

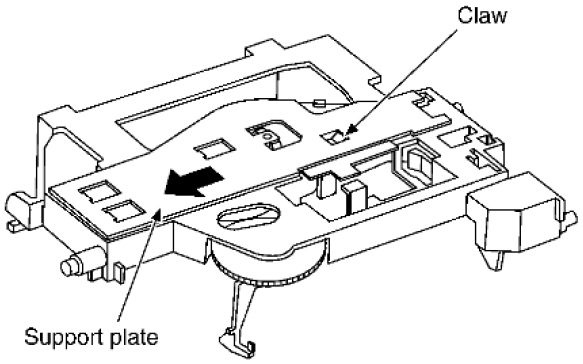


[Dissassembly/reassembly for the spindle base unit]

Step 1 Draw the 5 disc spacers.

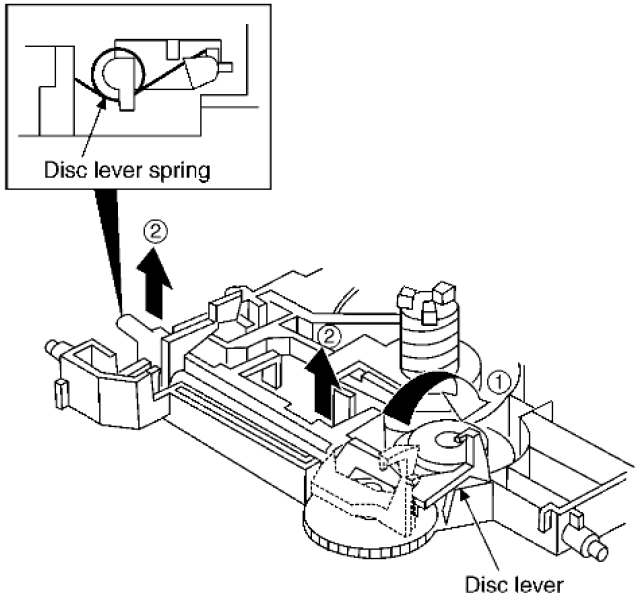


Step 2 Pushing the claw, slide the support plate in the direction of arrow, and then remove it.



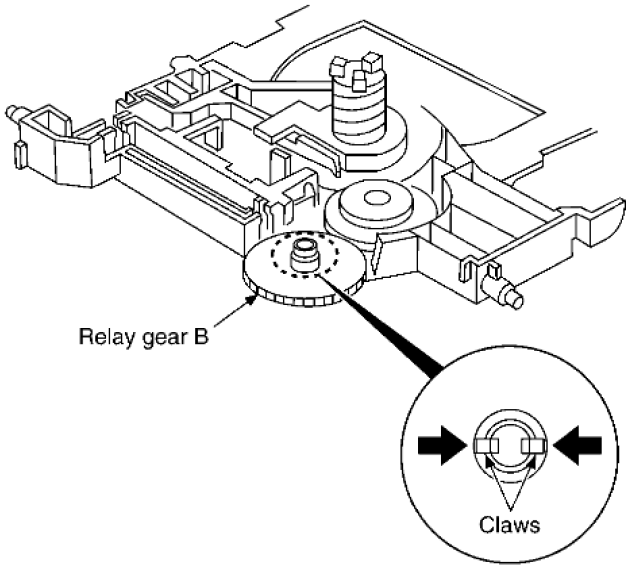
Step 3 Rotate the disc lever in the direction of arrow (1), draw the disc lever.

(Installation for disc lever spring)



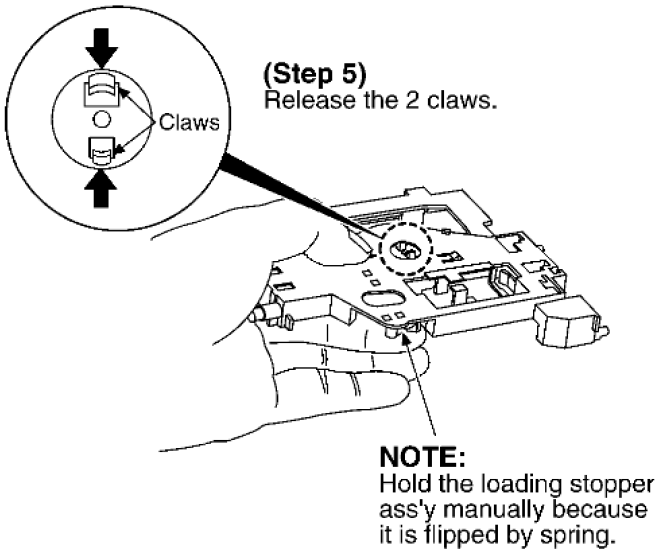
NOTE:

Take care not to lose the disc lever spring.



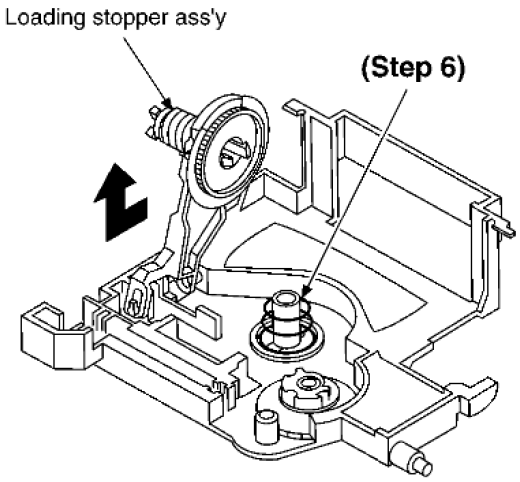
Step 4 Release the 2 claws, and then draw the relay gear B.

Step 5 Release the 2 claws as shown below.



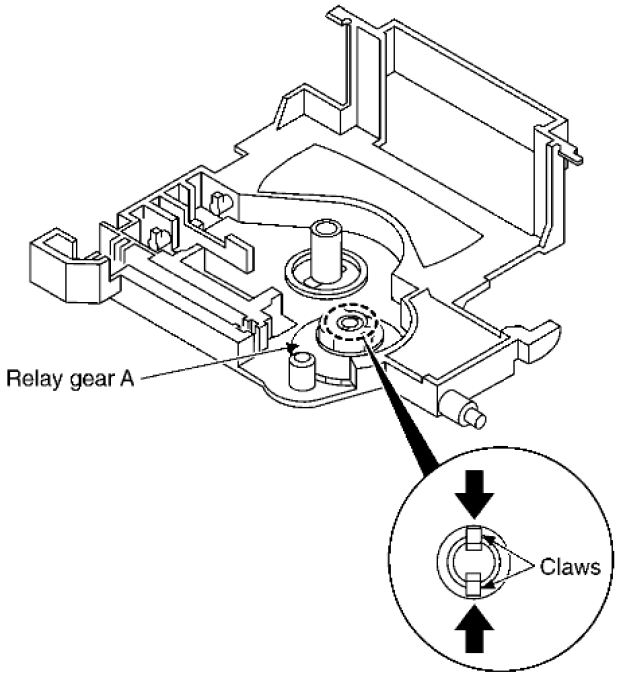
NOTE:

Hold the loading stopper ass'y manually bacause it is flipped by spring.



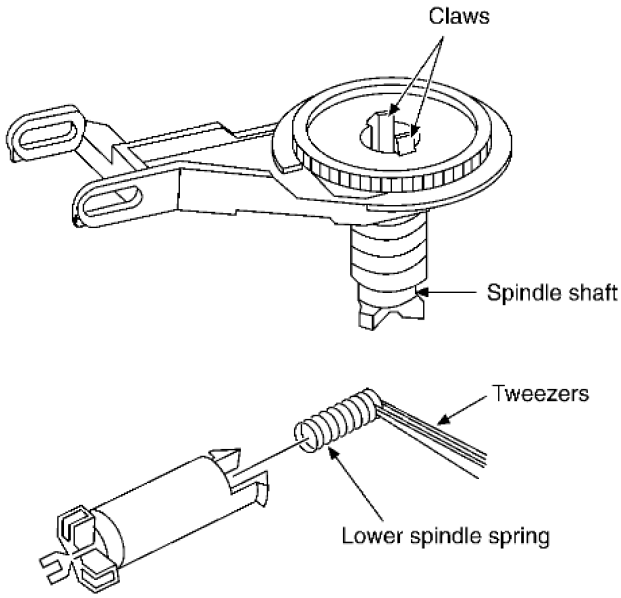
Step 6 Remove the cushion spring.

Step 7 Remove the loading stopper ass'y in the direction of arrow.



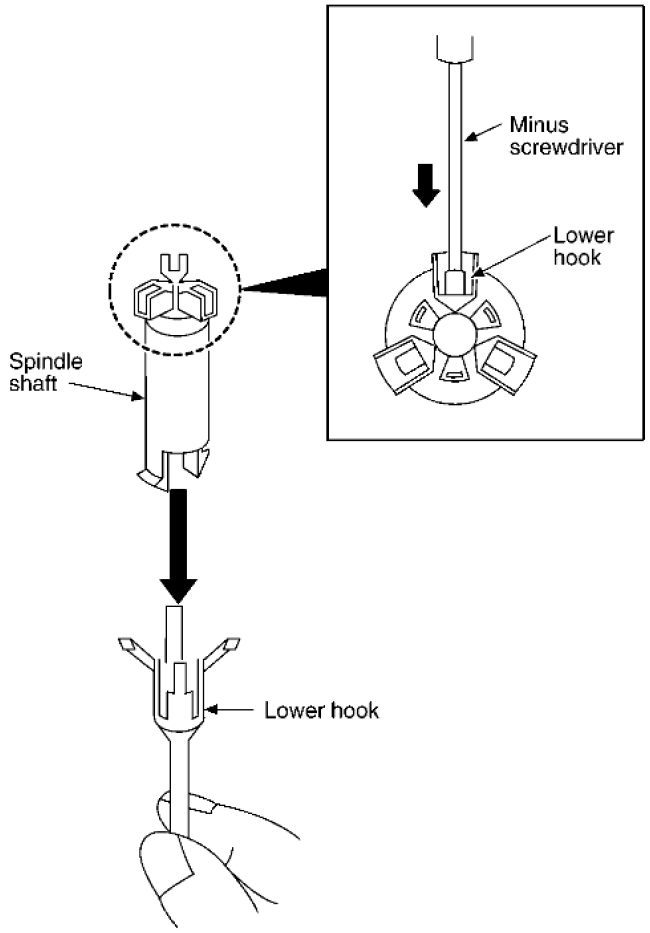
Step 8 Release the 2 claws, and then remove the relay gear A.

Step 9 Release the 2 claws, and then remove the spindle shaft.

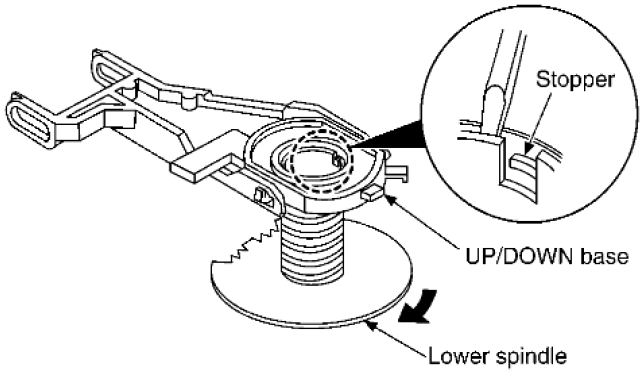


Step 10 Remove the lower spindle spring with tweezers.

Step 11 Force the lower hook with thin tip of minus screwdriver.

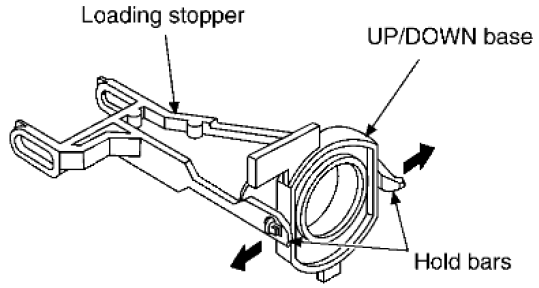


Step 12 Squeeze the shaft of lower hook, and then draw it.



Step 13 Rotate the lower spindle in the direction of arrow until the lower spindle interferes with stopper.

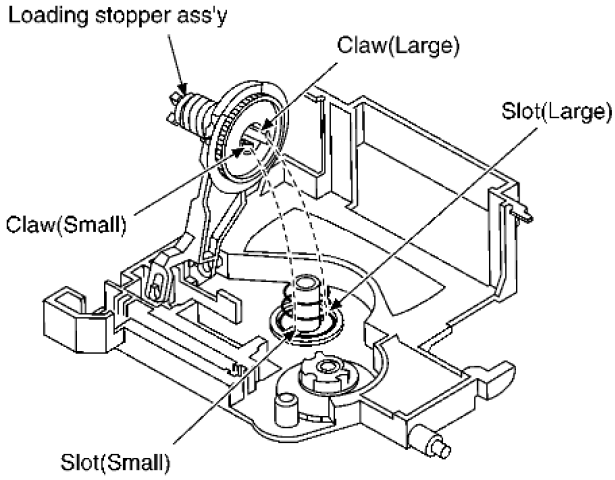
Step 14 Insert the thin tip of minus screwdriver between the lower spindle and UP/DOWN base, and then slacken the lower spindle to release the stopper. Then, rotate the lower spindle and remove it.



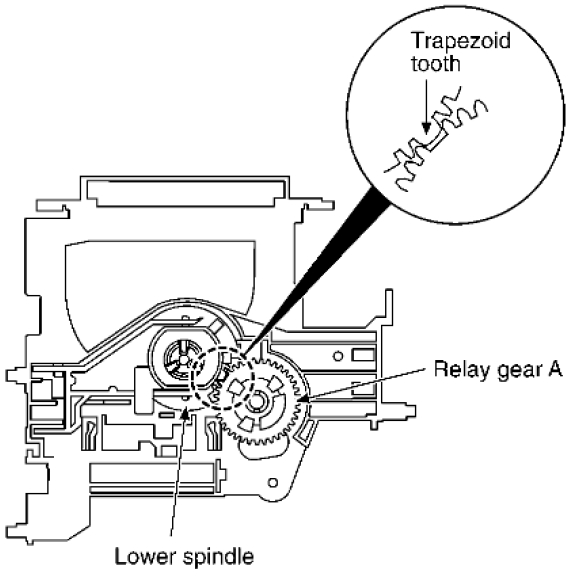
Step 15 Rotate the UP/DOWN base at a 90° angle. Then, spread the hold bars of loading stopper and remove the UP/DOWN base.

[Installation for loading stopper ass'y]

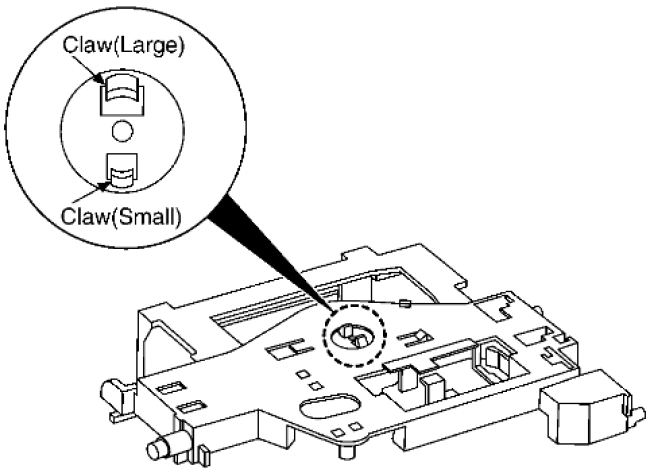
Step 1 Align the claw of loading stoppers ass'y with the slot of spindle base. (Caution should be exercised when alignment of claw due to the size of claws.)



Step 2 Lower the loading stopper ass'y, and then align the lower spindle with the trapezoid tooth of relay gear A.



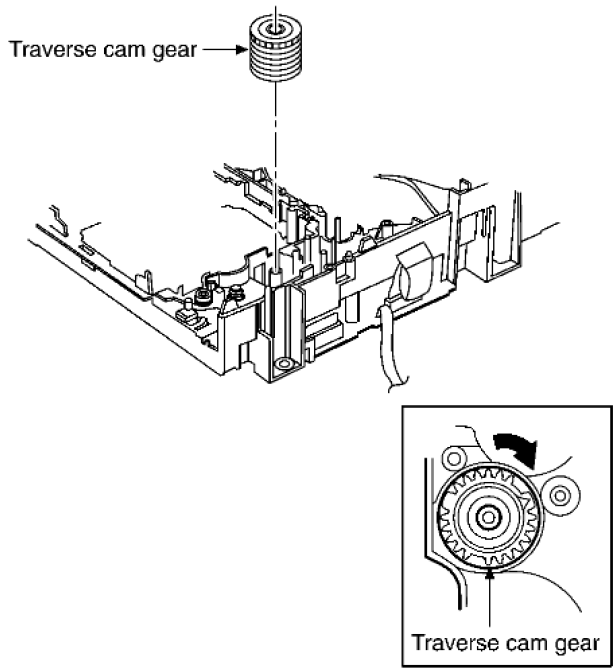
Step 3 Force the loading stopper ass'y, latch the claw firmly.



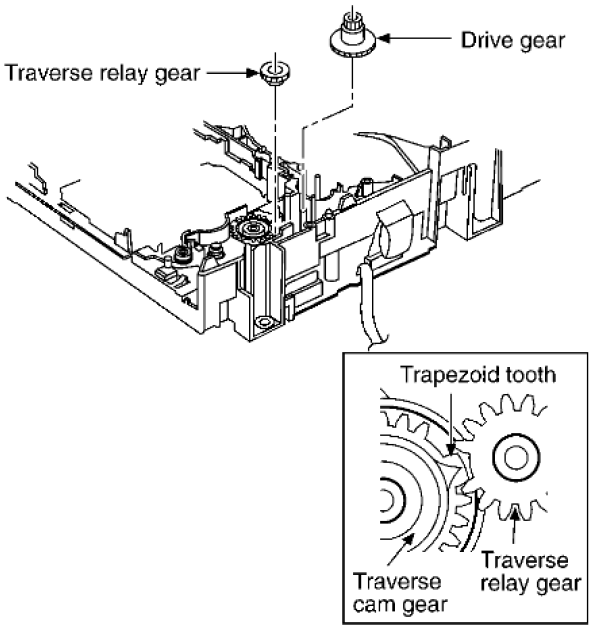
[Reassembly for mechanism base drive unit]

Step 1 Install the traverse cam gear.

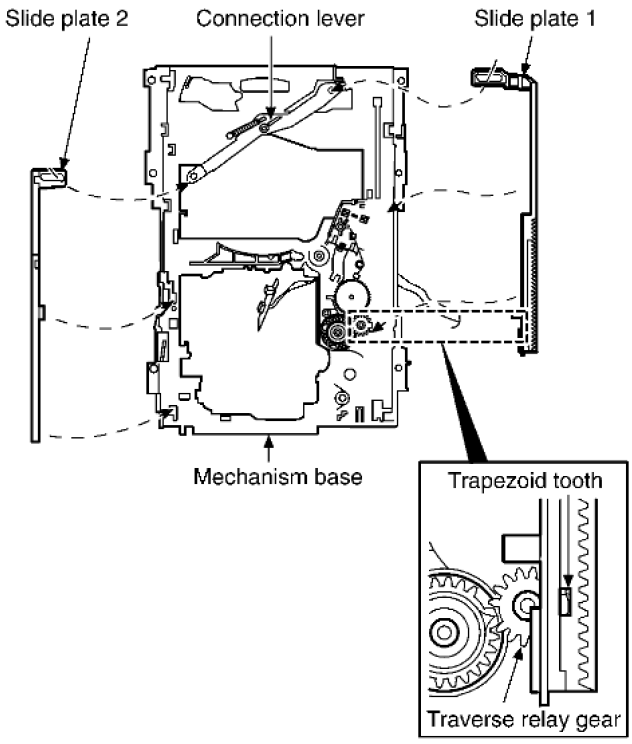
Step 2 Rotate the traverse cam gear to the direction of arrow.



Step 3 Install the drive gear and traverse relay gear.

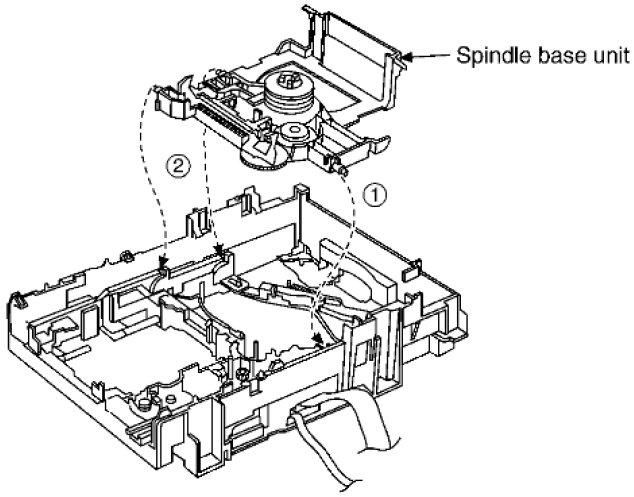


*When installing the traverse relay gear, align the trapezoid tooth of gear with tooth of traverse cam gear.

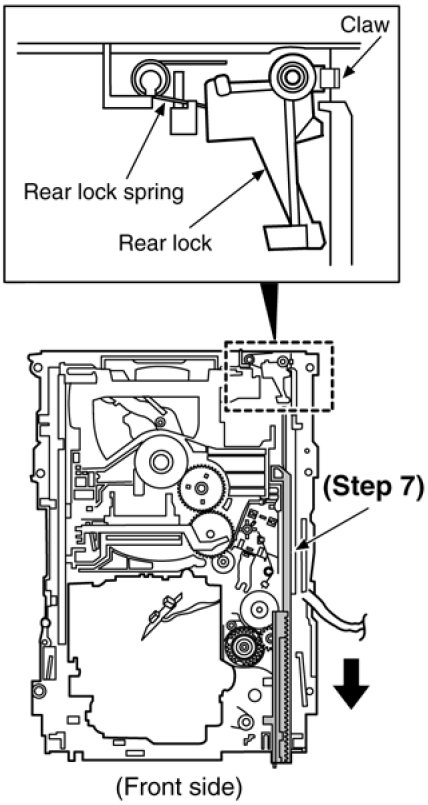


Step 4 Install the slide plate 2 to the mechanism base, and then match to the connection lever.

Step 5 Install the slide plate 1 to the mechanism base, and then match to the connection leve and align the trapezoid tooth of traverse relay gear with the slide plate 1.



Step 6 Install the spindle base unit. (First, slide plate 1.)

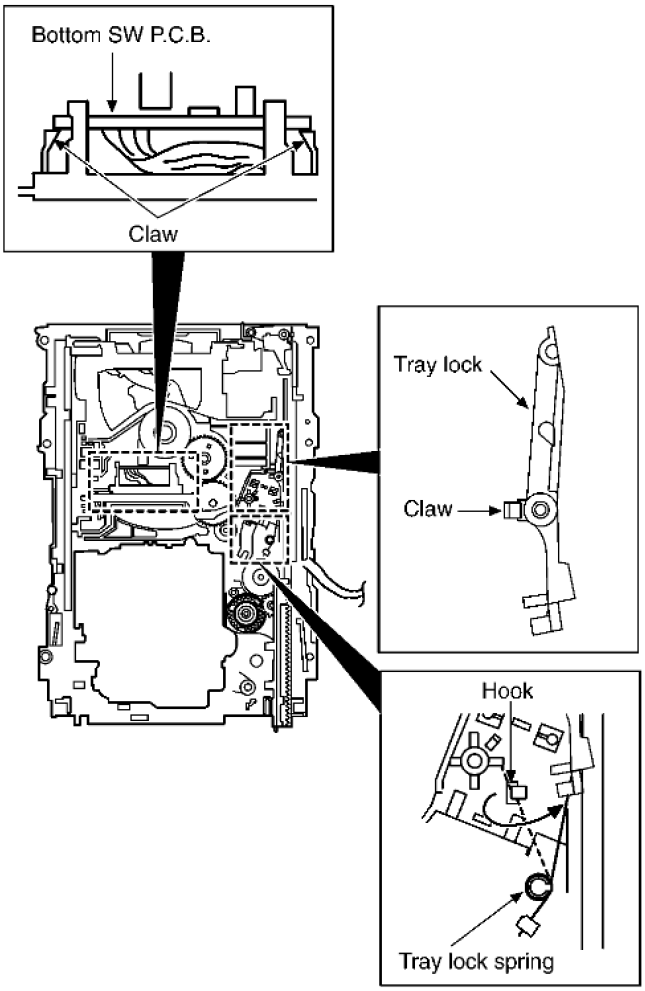


Step 7 Move the slide plate 1 to forward fully.

Step 8 Install the rear lock. (The claw should be latched.)

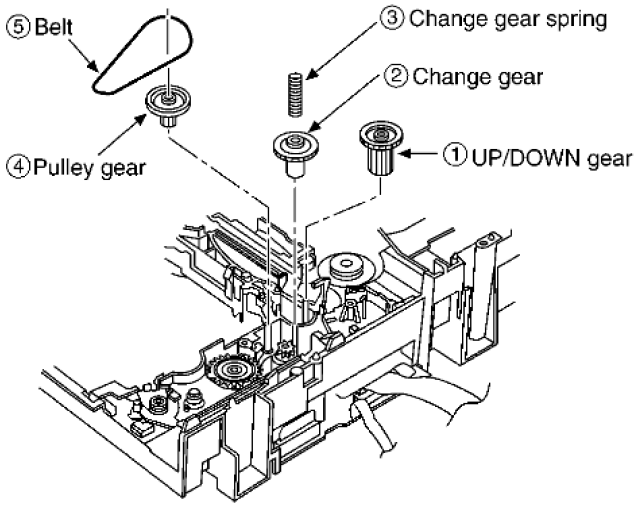
Step 9 Install the Spindle Position P.C.B.. (The claw should be latched.)

Step 10 Install the tray lock. (The claw should be latched.)

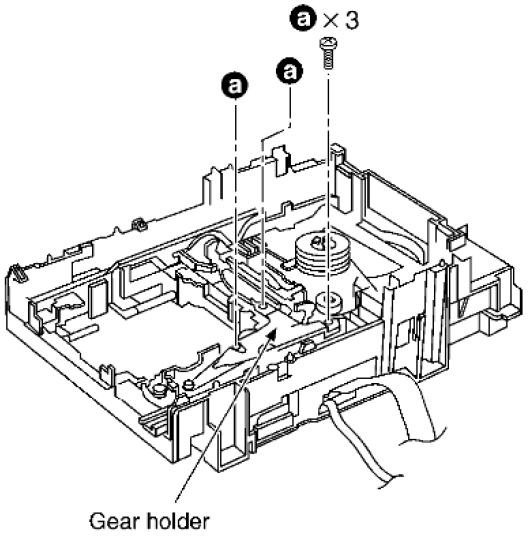


Step 11 Remove the tray lock spring from hook,and then latch to the tray lock.

Step 12 Install the UP/DOWN gear, change gear, change gear spring, pulley gear and belt in the order of (1) - (5).



Step 13 Install the gear holder, and then tighten the screw (a).



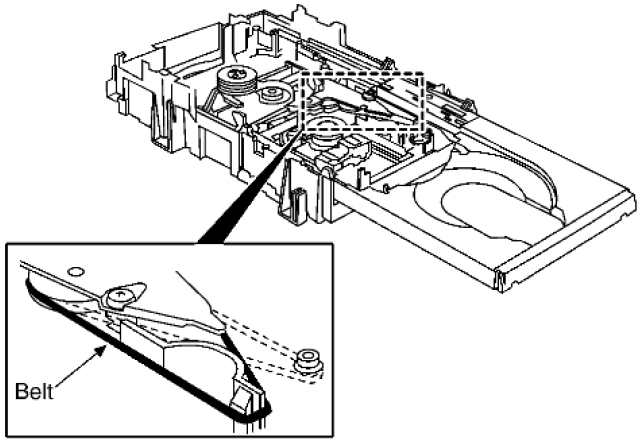
Step 14 Install the tray base, traverse ass'y, mechanism cover and upper plate.

[Operation check after servicing]

Check the proper operation of following items with gear and hexagonal screwdriver.

1. Open/close of tray base.
2. Moving the tray base to the stock side.
3. UP/DOWN operation of spindle base unit.
4. UP/DOWN operation of traverse ass'y.

10.11.4. Replacement for the motor ass'y



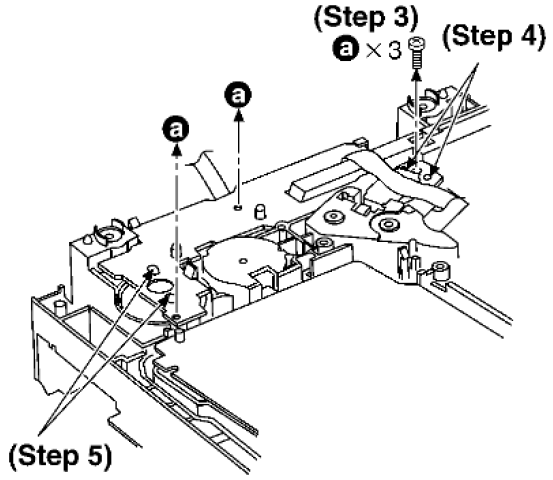
Step 1 Install the belt temporarily.

NOTE:

Take care not apply the grease to the belt.

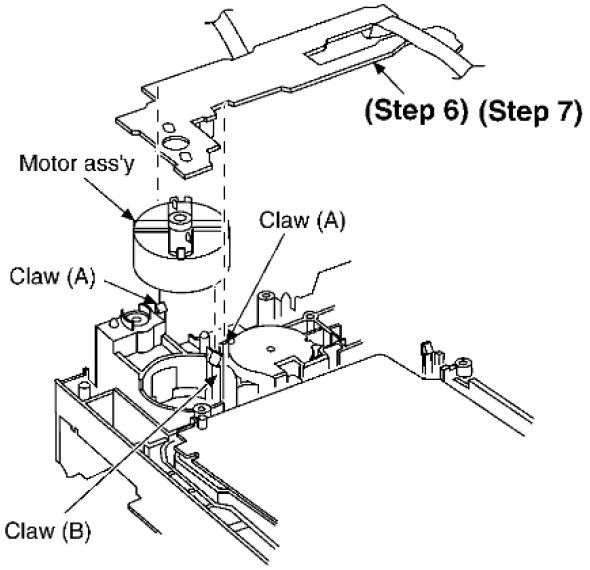
Step 2 Upset the CD loading unit.

Step 3 Remove 3 screws.



Step 4 Unsolder the plunger terminals (2 points).

Step 5 Unsolder the motor terminals (2 points).

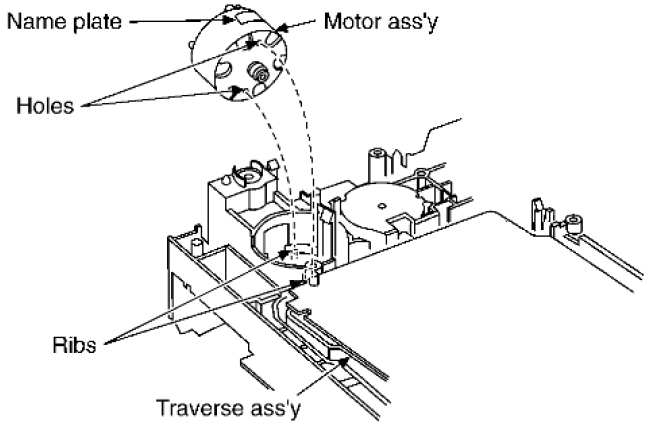


Step 6 Release the 2 claws (A), and then remove the Motor P.C.B.

Step 7 Release the claw (B), and then remove the motor ass'y.

[Notice for motor ass'y installation]

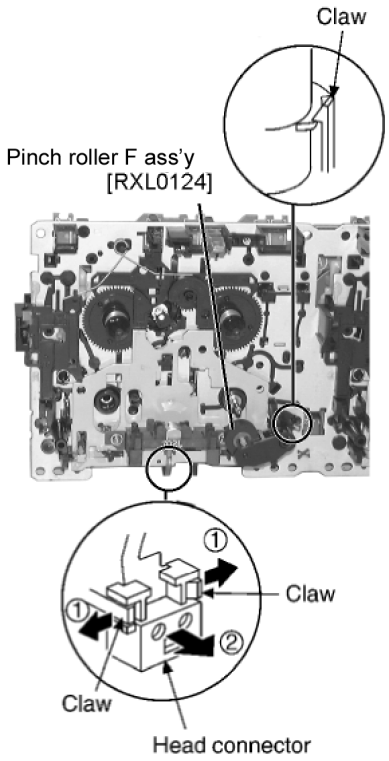
1. Locate the name plate of motor to the traverse ass'y.
2. Align the hole of motor with the ribs.



10.12. Replacement for the pinch roller ass'y and head block

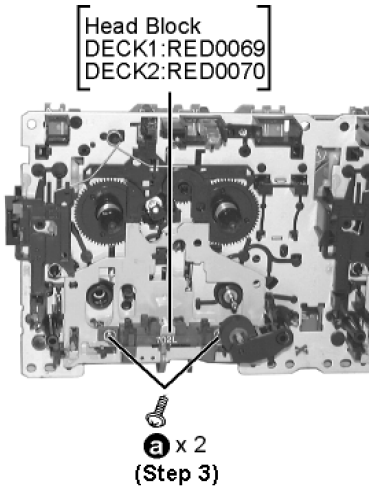
- Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 6) of Item 10.3 - Disassembly of CD Lid
- Follow the (Step 1) of Item 10.4 - Disassembly of the Rear Panel
- Follow the (Step 1) - (Step 3) of Item 10.5 - Disassembly of the CD Mechanism Unit
- Follow the (Step 1) - (Step 3) of Item 10.9 - Disassembly of the Front Panel Unit
- Follow the (Step 1) - (Step 5) of Item 10.10 - Disassembly of the Deck Mechanism Unit

*** The mechanism as shown below is for DECK1. For DECK 2, perform the same procedures.**



Step 1 Release the 2 claws, and then remove the pinch roller (R), (F).

Step 2 Release ther 2 claws, and then remove the head connector.



Step 3 Remove 2 screws.

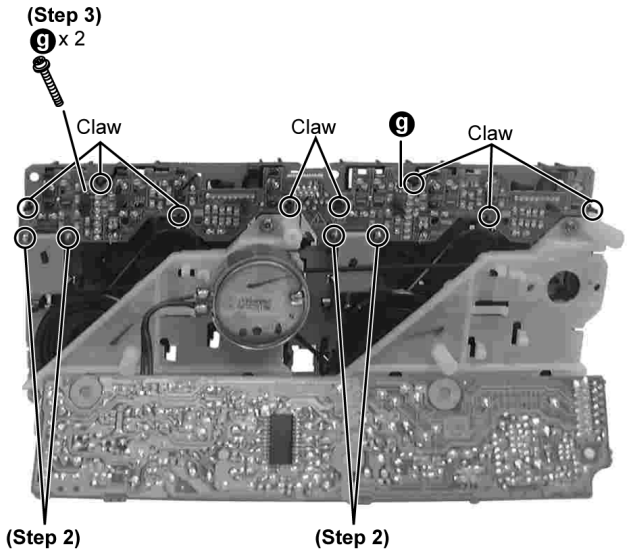
10.13. Replacement for the Deck motor ass'y, capstan belt A, capstan belt B and winding belt

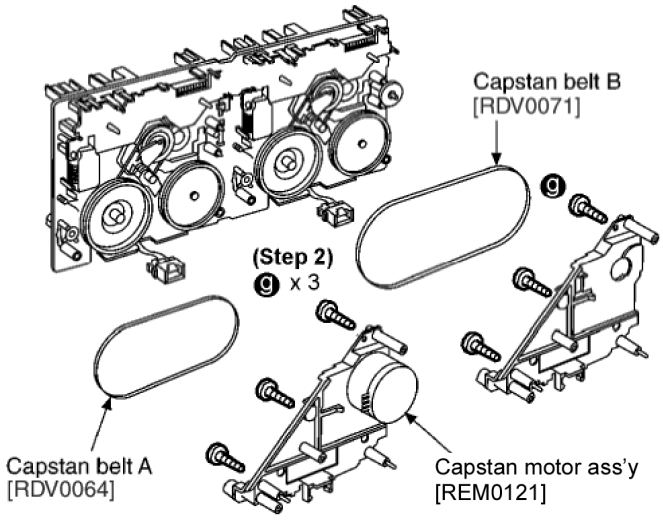
- Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 6) of Item 10.3 - Disassembly of CD Lid
- Follow the (Step 1) of Item 10.4 - Disassembly of the Rear Panel
- Follow the (Step 1) - (Step 3) of Item 10.5 - Disassembly of the CD Mechanism Unit
- Follow the (Step 1) - (Step 3) of Item 10.9 - Disassembly of the Front Panel Unit
- Follow the (Step 1) - (Step 5) of Item 10.10 - Disassembly of the Deck Mechanism Unit

Step 1 Release the 2 claws, and then remove the head connector.

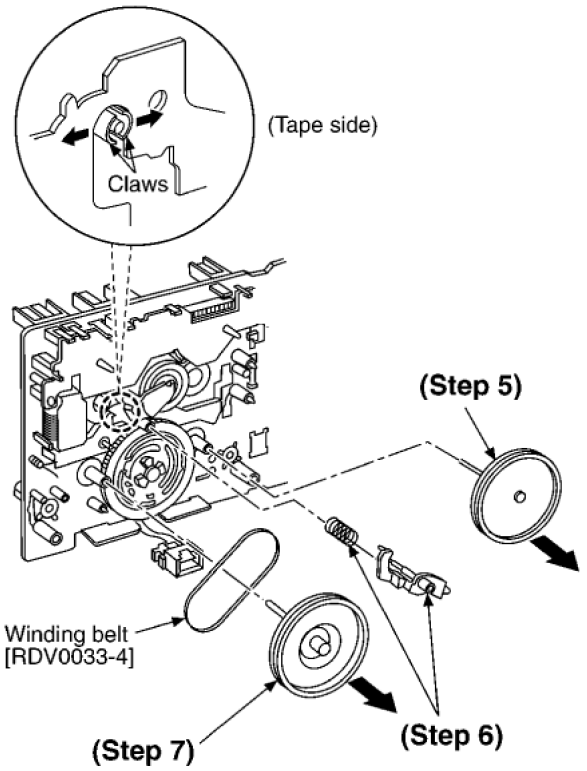
Step 2 De-solder plunger point.

Step 3 Remove the Deck Mechanism P.C.B.





Step 4 Remove 3 screws.



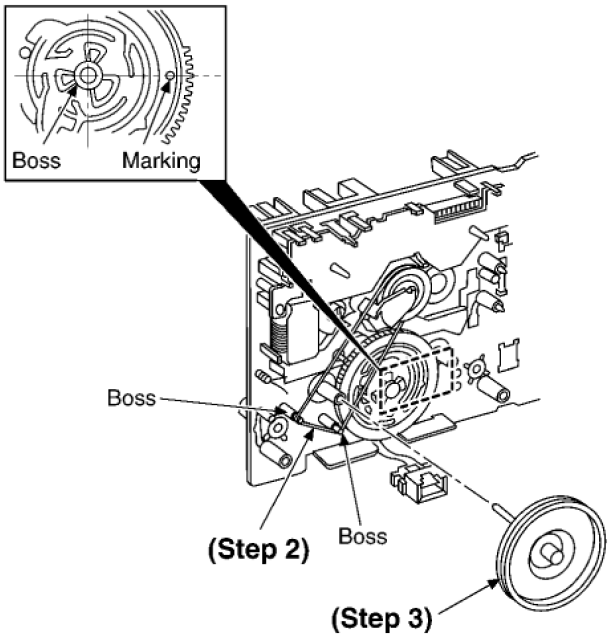
Step 5 Remove the flywheel R.

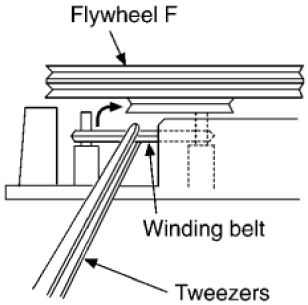
Step 6 Release the claw of tape side, and then remove the winding lever and spring.

Step 7 Remove the flywheel F.

[Installation of the belt]

Step 1 The boss and marking should be positioned horizontally.





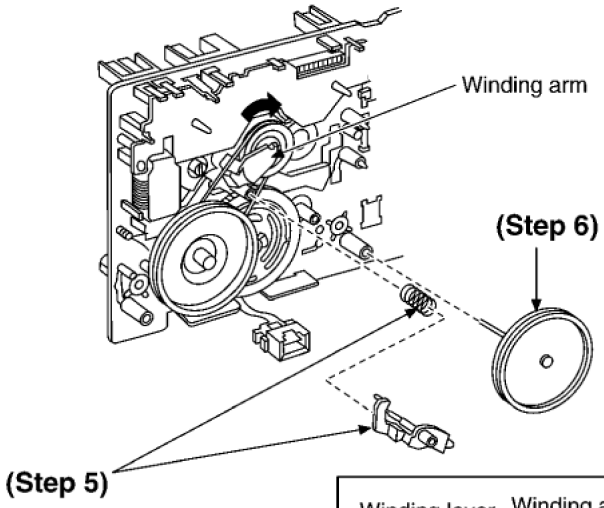
Step 2 Put the winding belt on the pulley temporarily.

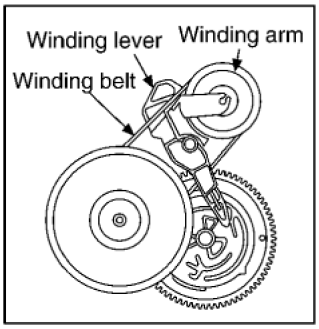
Step 3 Install the flywheel F.

Step 4 Put the winding belt on the flywheel F.

Step 5 Install the winding lever and spring while pressing the winding arm in the direction of arrow.

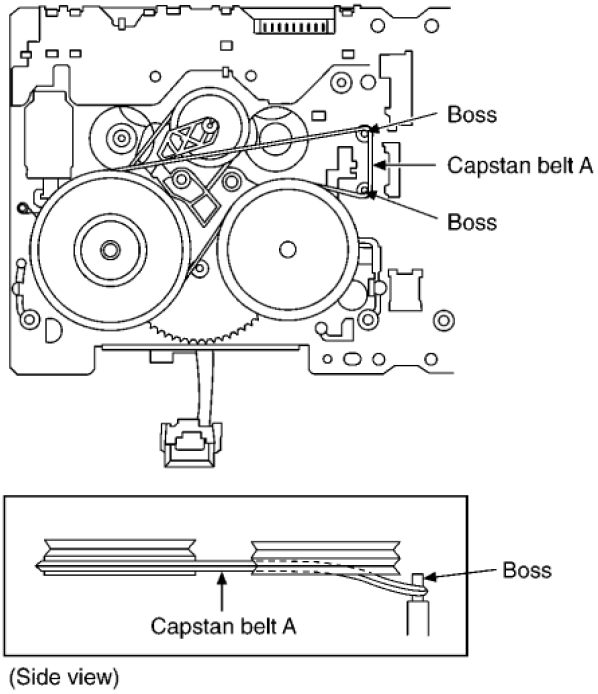
Step 6 Install the flywheel R.





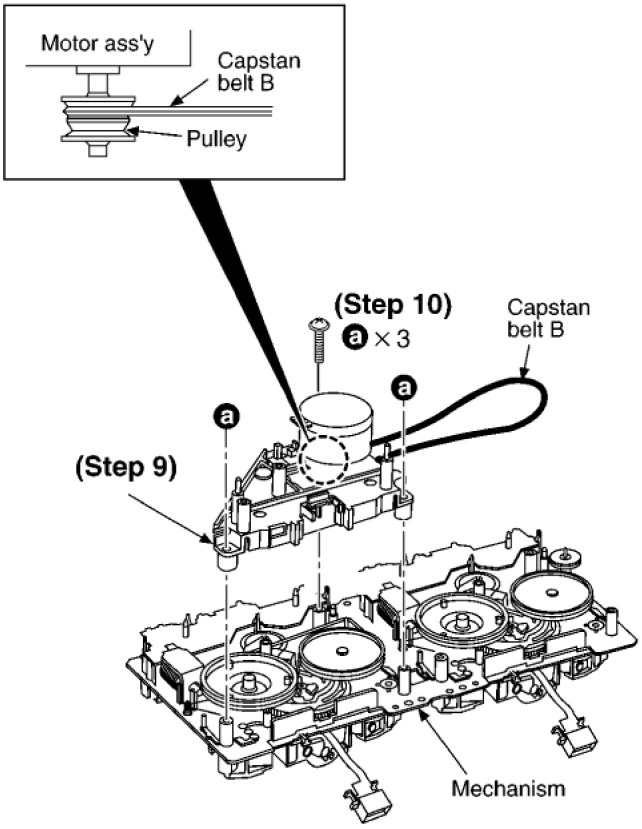
NOTE:
The winding lever should be positioned as shown below.

Step 7 Put the capstan belt A temporarily as shown below.



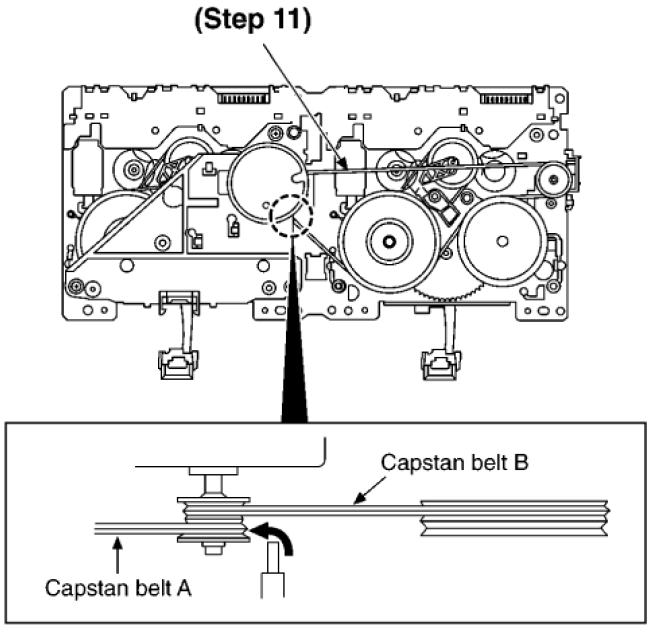
Step 8 Put the capstan belt B on the motor ass'y pulley.

Step 9 Install the sub chassis to the mechanism, and then tighten screws.



Step 10 Remove 3 screws.

Step 11 Put the capstan belt B as shown below.

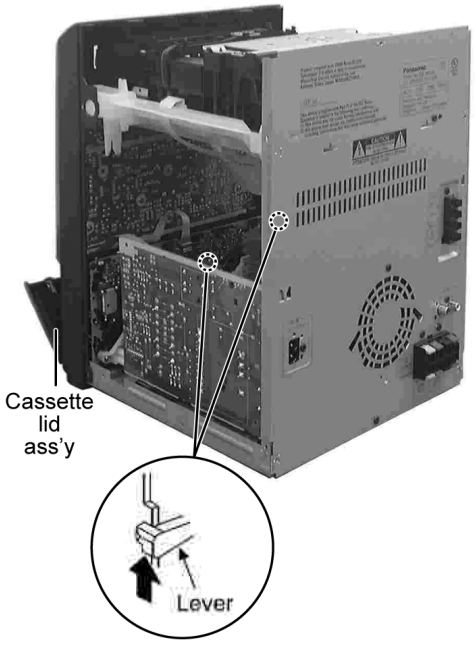


Step 12 Put the capstan belt A on the motor ass'y pulley.

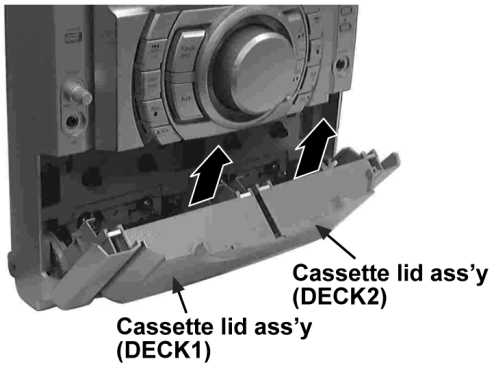
10.14. Replacement for the cassette lid ass'y

・Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet

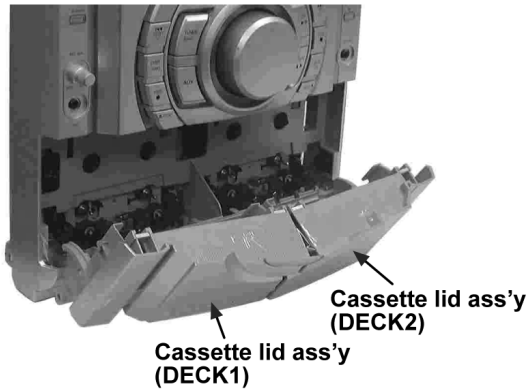
Step 1 Force the lever upward, open the cassette lid ass'y. (For DECK1 and DECK2)



Step 2 Lift up the cassette lid ass'y in the direction of arrow. (For DECK1 and DECK2).



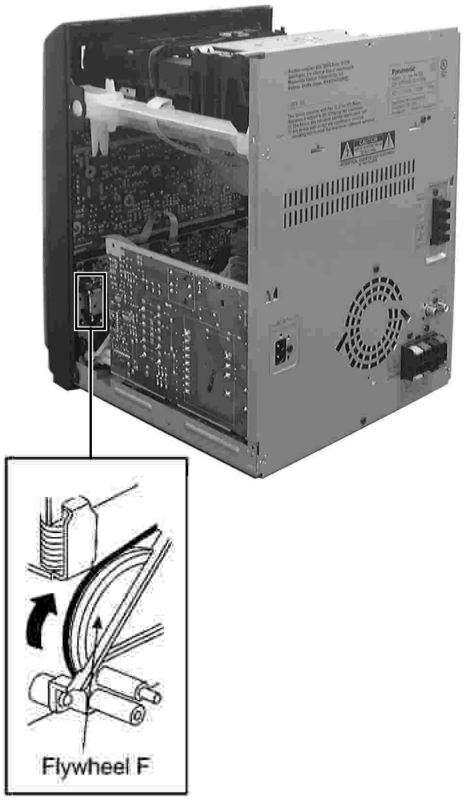
Step 3 Remove the cassette lid ass'y. (For DECK1 and DECK2).



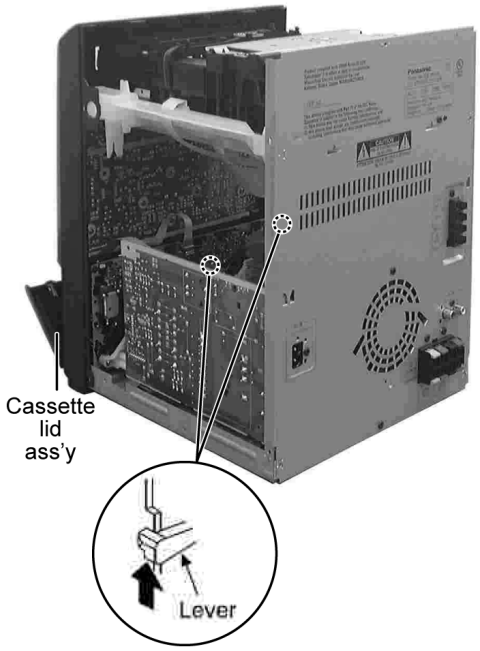
10.15. Measure for tape trouble

・Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet

Step 1 If a cassette tape cannot be removed from the deck since the tape is caught by the capstan or pinch roller during playback or recording, rotate the flywheel F in the direction of the arrow to remove the tape.



Step 2 Force the lever upward and open the cassette lid ass'y. Take the cassette tape off.



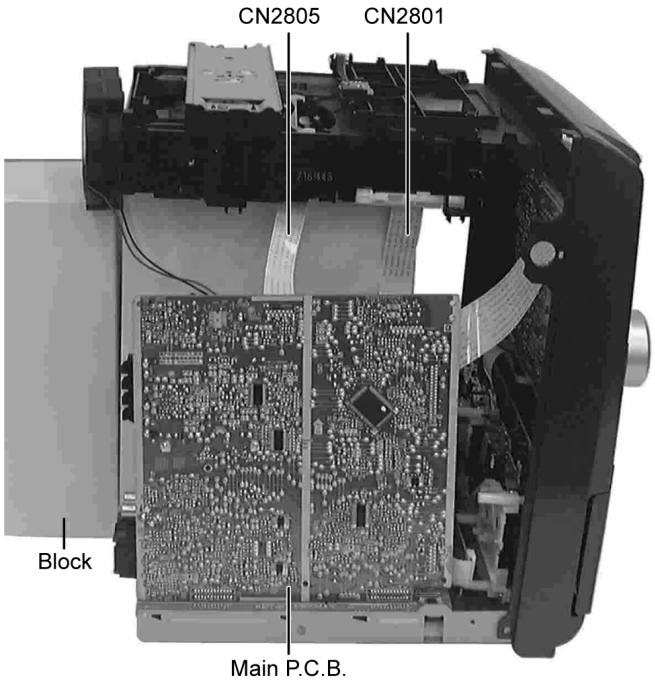
11 Checking for major P.C.B.

Note:

For the disassembling procedure, see Section 10.

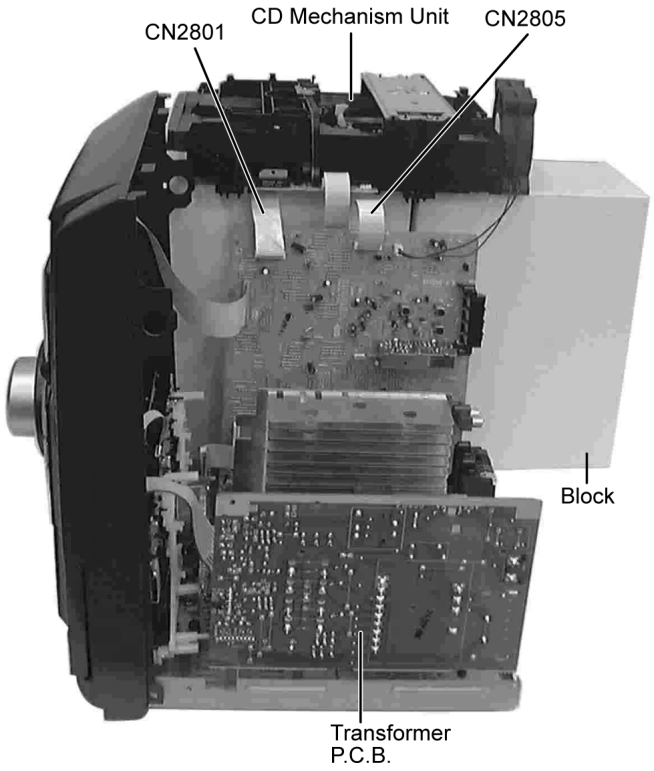
11.1. Checking the Main P.C.B.

1. Remove Top Cabinet and Rear Panel.
2. Remove CD Lid.
3. Remove CD Mechanism Unit.
4. Connect FFC wires (CN2801 & CN2805) from CD Mechanism Unit.



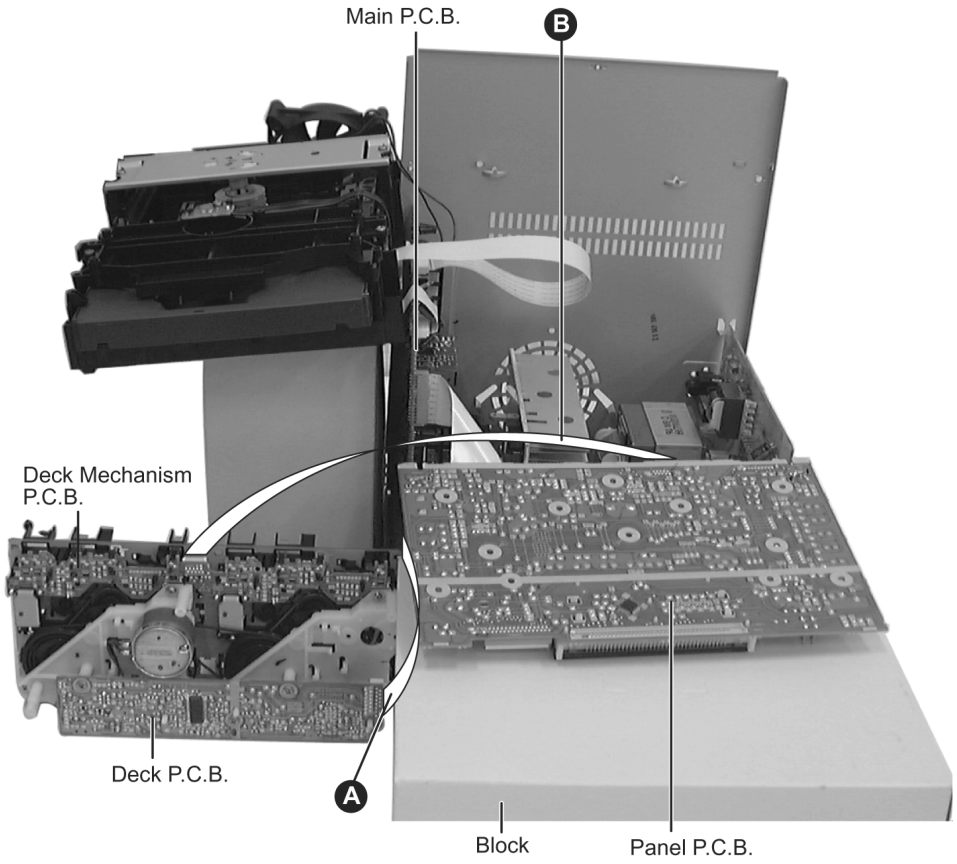
11.2. Checking the Transformer P.C.B.

1. Remove Top Cabinet and Rear Panel.
2. Remove CD Lid.
3. Remove CD Mechanism Unit.
4. Connect FFC wires (CN2801 & CN2805) from CD Mechanism Unit.



11.3. Checking the Panel, Deck & Deck Mechanism P.C.B.

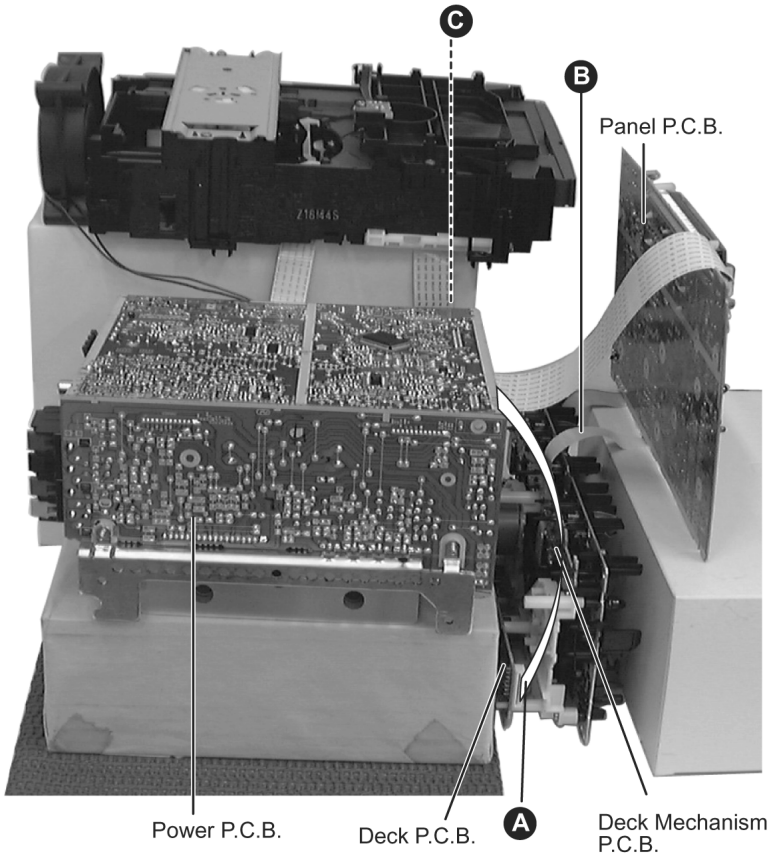
1. Remove Top Cabinet.
2. Remove CD Lid.
3. Remove CD Mechanism Unit.
4. Remove volume knob at front panel.
5. Remove Panel P.C.B.
6. Remove Deck Mechanism Unit.
7. Use the extension cable (A) to reconnect (CN1001) Deck P.C.B. and (CN2803) Main P.C.B.
8. Use the extension cable (B) to reconnect (CP6401) Panel P.C.B. and (CN971) Deck Mechanism P.C.B.



Service Tools	
Extension FFC	
(A) Deck P.C.B. - Main P.C.B.	REEX0485 (14 Pins)
(B) Panel P.C.B. - Deck Mechanism P.C.B.	REEX0484 (10 Pins)

11.4. Checking the Power P.C.B.

1. Remove Top Cabinet and Rear Panel.
2. Remove CD Lid.
3. Remove CD Mechanism Unit.
4. Remove 3 screws at Transformer P.C.B..
5. Remove 2 screws at heat sink and 1 screw at Power P.C.B.
6. Flip the Power P.C.B.
7. Insulate the Power P.C.B. with insulation material to avoid short circuit.
8. Use the extension cable (A) to reconnect (CN1001) Deck P.C.B. and (CN2803) Main P.C.B.
9. Use the extension cable (B) to reconnect (CP6401) Panel P.C.B. and (CN971) Deck Mechanism P.C.B.
10. Use the extension cable (C) to reconnect (H5950/W5950) Power P.C.B. and (CN5950) Transformer P.C.B.



Service Tools	
Extension FFC	
(A) Deck P.C.B. - Main P.C.B.	REEX0485 (14 Pins)
(B) Panel P.C.B. - Deck Mechanism P.C.B.	REEX0484 (10 Pins)
(C) Power P.C.B. - Transformer P.C.B.	RFKAK330 (9 Pins)

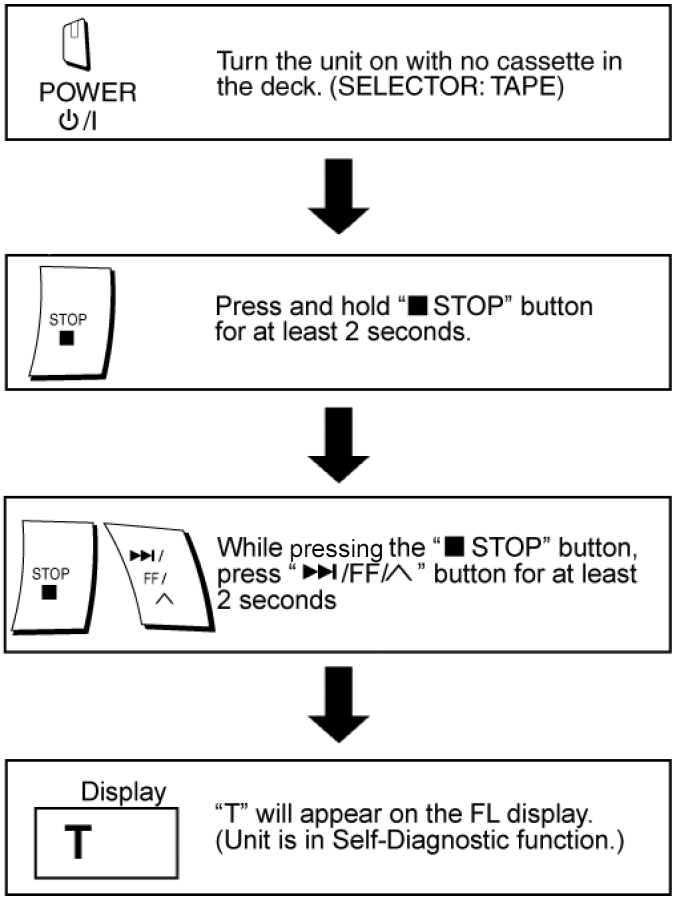
12 Self-Diagnostic Function

12.1. Self-diagnostic display

This unit is equipped with a self-diagnostic display function which, if a problem occurs, will display an error code corresponding to the problem.

Use this function when performing maintenance on the unit.

12.2. How to enter the Self-Diagnostic Function


POWER
⏻/I
Turn the unit on with no cassette in the deck. (SELECTOR: TAPE)
STOP
Press and hold "■ STOP" button for at least 2 seconds.
STOP
▶▶I/ FF/ ^
While pressing the "■ STOP" button, press "▶▶I/FF/^" button for at least 2 seconds
Display
T
"T" will appear on the FL display. (Unit is in Self-Diagnostic function.)

12.3. Cassette Mechanism Test (For error code H01, H02, H03, F01)

1. Press "TAPE, DECK 1/2" to select Deck 2.
2. Load a cassette tape with the erasure prevention tab, remove from left side only and close the cassette holder.
3. Press "FAST FORWARD MEMORY" (Tape will be stop after 2 seconds)
4. Load a cassette tape with the erasure prevention tab, remove from right side only and close the cassette holder.
5. Press "REVERSE FM MODE/BP" (Tape will be stop after 2 seconds)
6. Load a pre-recorded tape with both side record tabs intact and close the cassette holder.
7. Press "PLAY/TUNE/TIME ADJ UP" (After TPS function, tape will stop automatically)
8. Press "REC/STOP" (Tape will not move)
9. Press "STOP/TUNE MODE" to indicate Error code.
   - If several problem exist, error code will change each time when "n /STOP" is pressed.

   (e.g. H01 → H03 → F01 .....etc.)
10. Press "TAPE, DECK 1/2" to select Deck 1.
11. Repeat step 2 to 9 to test Deck 1. (Tape Deck 1 will not check H02 because of no recording function)

12.4. CD Mechanism Test (F15, F26, F16, F17, F27, F28, F29, F30, H15 & H16)

1. Press "CD".
2. Press "OPEN/CLOSE (1)" and place a CD.

3. Press “OPEN/CLOSE (1)” to close the tray.
4. Press “OPEN/CLOSE (5)” and wait until the tray is open.
5. Press “OPEN/CLOSE (1)” and remove the CD.
6. Press “OPEN/CLOSE (1)” to close the tray.
7. Press “n/STOP” to indicate Error Code.
   - If several problem exist, error code will change each time when “n/STOP” is pressed. (e.g. F15 → F26 → F16 ....etc).

12.5. To clear all Error code

1. Press “STOP/TUNE MODE” button for 5 seconds.
2. FL indicator shows “CLEAR” for 1 second and change to “T”.

12.6. How to get out from Self-Diagnostic function

1. Press “Power” button OFF.

12.7. Power Amplifier Failure (F61)

1. When power amplifier fail, F61 will indicate automatically.

12.8. Description of Error Code

12.8.1. Abnormality detection for Deck Mechanism block

No.	Abnormal Items	Error Display	Method of Detection
1	MODE SW abnormal	H01	Normal operation during mecha transition, MODE SW abnormal is memorized. The content of abnormality can be confirmed in the abnormal detection mode explained in the later section.
2	REC INH SW abnormal	H02	The content of abnormality can be confirmed in the abnormal detection mode explained in the later section.
3	HALF SW abnormal	H03	The content of abnormality can be confirmed in the abnormal detection mode explained in the later section.
4	Reel pulse abnormal	F01	The content of abnormality can be confirmed in the abnormal detection mode explained in the later section.

12.8.2. Abnormality detection for CD/Changer block

No.	Abnormal Items	Error Display	Method of Detection
1	REST SW abnormal	F15	Under normal operation (Self-Diagnostic Mode inclusive), this error occurs when the REST SW ON is not detected within the specified time and shall be memorized.
2	Transmission error between CD servo LSI and micon	F26	Under normal operation (Self-Diagnostic Mode inclusive), this error occurs when the selection is set to CD and SENSE=’H’ is detected and SENSE=’L’ is not detected within a fail safe time (20ms) after system command transmission was sent.
3	CLAMP SW abnormal	F16	Refer to section 12.8.4 (Mechanism Error Code Table) [M-0A] error is detected.
4	BOTTOM SW abnormal	F17	Refer to section 12.8.4 (Mechanism Error Code Table) [M-09] error is detected.
5	POSITION SW abnormal	F27	Refer to section 12.8.4 (Mechanism Error Code Table) [M-05 ~ M-08] error is detected.
6	SW1 abnormal	F28	Refer to section 12.8.4 (Mechanism Error Code Table) [M-02 ~ M-08] error is detected.
7	SW2 abnormal	F29	Refer to section 12.8.4 (Mechanism Error Code Table) [M-02 ~ M-08] error is detected.
8	OPEN SW abnormal	H15	Refer to section 12.8.4 (Mechanism Error Code Table) [M-01] error is detected.
9	CLOSE SW abnormal	H16	Refer to section 12.8.4 (Mechanism Error Code Table) [M-01] error is detected.
10	DISC SENSOR	F30	Refer to section 12.8.4 (Mechanism Error Code Table) [M-01] error is detected.

12.8.3. Power supply related error detection

No.	Abnormal Items	Error Display	Method of Detection
1	POWER AMP output abnormal	F61	During normal operation, if DCDET 1/2 becomes 'L', normal POWER OFF process shall not be executed, PCNT shall be switched to 'L' immediately. GOODBYE shall not be displayed and the error display F61 will be displayed instead. 2 seconds after the F61 display, ECONO shall be set to 'L' and FL display shall be turned off. The error content shall be memorized when the abnormality occurs and can be displayed in the C-mecha self-diagnostic mode described later.

12.8.4. Error Code (CR20 Mechansim)

1. If mechanism problem occurs during normal or aging mode, the error code is "remembered" and shown on the FL display.
2. Reset Condition of Error Code
   a. During cold start of micro-processor IC.
   b. Restart of aging mode for the mechanism unit.
3. Mechanism Error Code

Mechansim Error Code Table

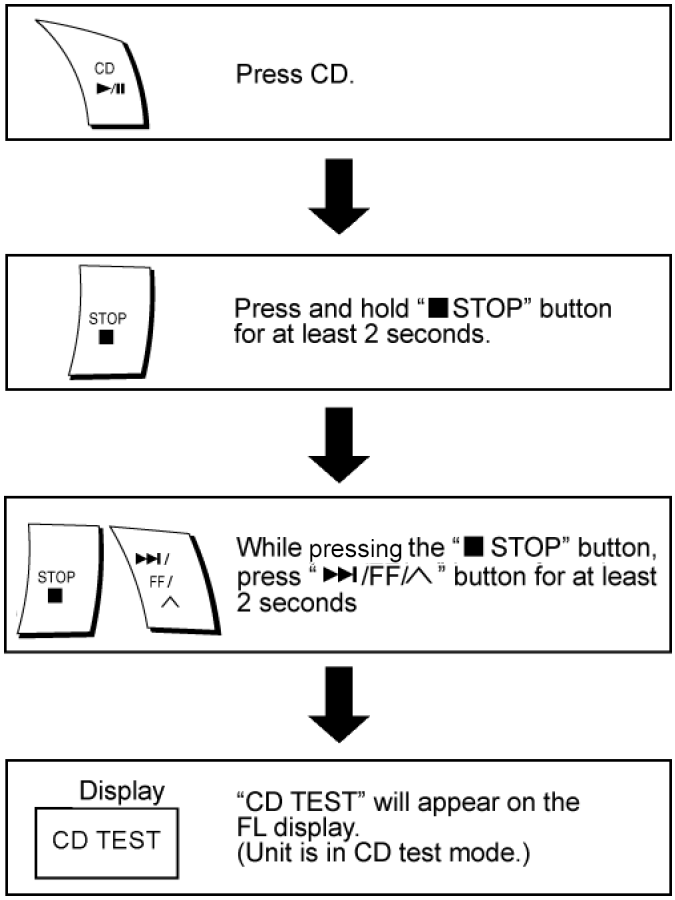
Error Code	Description
M-00	No Error
M-01	OPEN Position - Horizontal Motion Abnormality at play position
M-02	PLAY Position - Horizontal Motion Abnormality at stock position
M-03	PLAY Position - Horizontal Motion Abnormality during changing position
M-04	CHANGE Position - Horizontal Error of Stock position
M-05	CHANGE Position - Ascending motion Error
M-06	CHANGE Position - Descending motion Error
M-07	STOCK Position - Ascending motion Error
M-08	STOCK Position - Descending motion Error
M-09	Abnormality during change position (bottom switch)
M-0A	Clamp Error
M-0B	Access Failure - Access Time of more tha 30 secs (Total time of automatic → Read TOC → Track access)

4. When the mechanism unit stops due to error during aging model, error code is remembered and counts of the errors are displayed on the FL display.

13 CD Test Mode Function

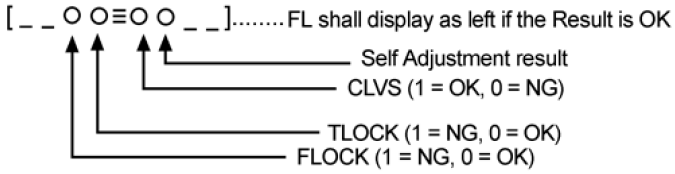
This CD test mode is provided to check CD unit without connecting to changer loading mechanism. This mode shall operate CD PLAY with CD unit being connected only and CD Automatic Alignment result is shown on FL display.

13.1. How to set CD test mode


CD
Press CD.
STOP
Press and hold "■STOP" button for at least 2 seconds.
STOP
FF
While pressing the "■ STOP" button, press "▶▶I/FF/∧" button for at least 2 seconds
Display
CD TEST
"CD TEST" will appear on the FL display.
(Unit is in CD test mode.)

13.2. CD Automatically Adjustment result indication

Under CD test mode, pressing the numeric key '0' on the remote controller will display the auto adjustment result. FLOCK, TLOCK and CLVS status shall be shown as below:



During the above display, executing CD PLAY will display auto adjustment result for CD PLAY mode.

13.3. CD Mecha Aging Test Mode (CR20)

1. Functional summary of CD aging test mode

   It is for the purpose to determine the reliability of the CD changer.

2. To enter into CD aging test mode

   a) First, enter into self-diagnostic mode (Refer to Section 12.2. How to enter the Self-Diagnostic Function)

   b) In the self-diagnostic mode, switch the SELECTOR to [▶/II, CD] and press [I◀◀/REW/∨] . It will enter into CD aging test mode.

   When in CD Aging test mode, the following operation will begin and repeated:

   1. [DISC STOCKER] → DISC LOAD → TRAY OPEN (2 secs) → TRAY CLOSE] as one count.
   2. DISC 1 → DISC 2 → DISC 3 → DISC 4 → DISC 5 → DISC 1.....repeating this endlessly.

   ・While performing the above operation, the FL display will show the number of its operations starting from 00001. With reference to figure as below.

- It shall move up one counter when the above operations ends. The counter will reset to 00000 when 99999 is reached.
- To exit CD aging test mode, press **[⏻/I, POWER]** button, the tray will return to its PLAY position and power will be off.

13.4. Micon ROM Checksum and Version Display Mode

1. Functional Summary

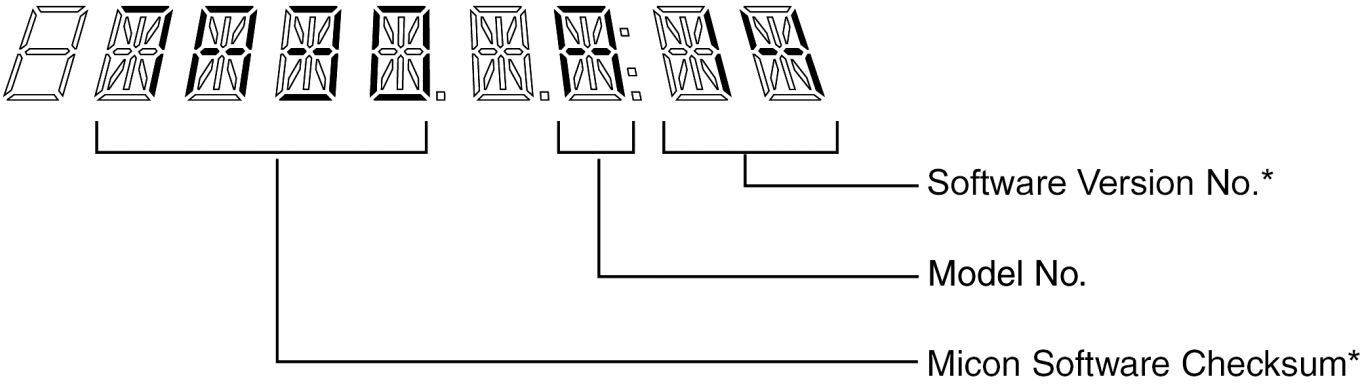
   Display version number and calculated checksum of the micon software.

2. To enter into Micon ROM checksum and Version Display Mode.

   a. Enter into Self-Diagnostic Mode (Refer to Section 12.2).

   b. In the Self-Diagnostic Mode, Press [►/II, CD] twice.

   The version number and the calculated ROM Checksum of the current software will be displayed on the FL as shown in this example:



*** Note: The Software Version No. & Micon Software Checksum differs from set to set.**

- The ROM Checksum is calculated on demand, not hard coded.
- The ROM Checksum is calculated by talking the arithmetic SUM of the ROM contents form the programs's START address until the END address.

  START address = [1080]H

  END address = [FFFD]H

14 Measurements and Adjustments

14.1. Cassette Deck Section

- Measurement Condition
  - Make sure head, capstan and press roller are clean.
  - Judgeable room temperature 20 ± 5 °C (68 ± 9°F)
- Measuring instrument
  - EVM (DC Electronic voltmeter)
  - Digital frequency counter
- Test Tape
  - Tape speed gain adjustment (3 kHz, -10 dB); QZZCWAT

14.1.1. Tape Speed Adjustment (Deck 1/2)

1. Set the tape edit button to “NORMAL” position.
2. Insert the test tape (QZZCWAT) to DECK 2 and playback (FWD side) the middle portion of it.
3. Adjust Motor VR (DECK 2) for the output value shown below.

   Adjustment target: 2940 ~ 3060 Hz (NORMAL speed)

4. After alignment, assure that the output frequency of the DECK 1 FWD are within ±60 Hz of the value of the output frequency of DECK 2 FWD.

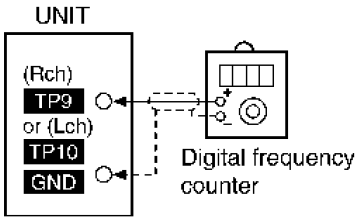


Fig.1

14.1.2. Bias and Erase Voltage Check

1. Set the unit “AUX” position.
2. Insert the Normal blank tape (QZZCRA) into DECK 2 and the unit to “REC” mode (use “l REC/STOP” key).
3. Measure and make sure that the output is within the standard value.

Bias voltage for Deck 2	14±4mV (Normal)
Erase voltage for Deck 2	80mV (Normal)

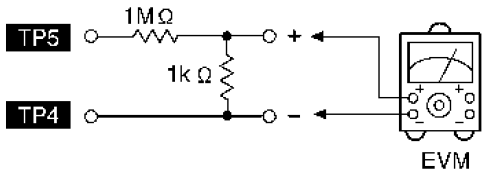


Fig.2

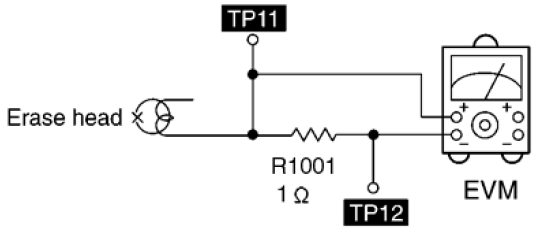


Fig.3

14.1.3. Bias Frequency Adjustment (Deck 1/2)

1. Set the unit to “AUX” position.
2. Insert the Normal blank tape (QZZCRA) into DECK 2 and set the unit to “REC” mode (l use “REC/STOP” key).
3. Adjust L1002 so that the output frequency is within the standard value.

   Standard Value: 97 ±8 kHz

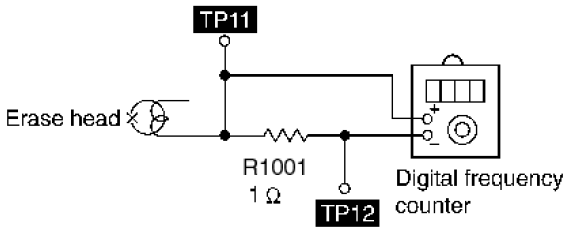


Fig.4

14.2. Tuner Section

14.2.1. AM-IF Alignment

1. Connect the instrument as shown in Fig.5.
2. Set the unit to AM mode.
3. Apply signal as shown in Fig. 5 from AM-SG.
4. Adjust Z2602 so that the output frequency is maximized in Fig. 6.

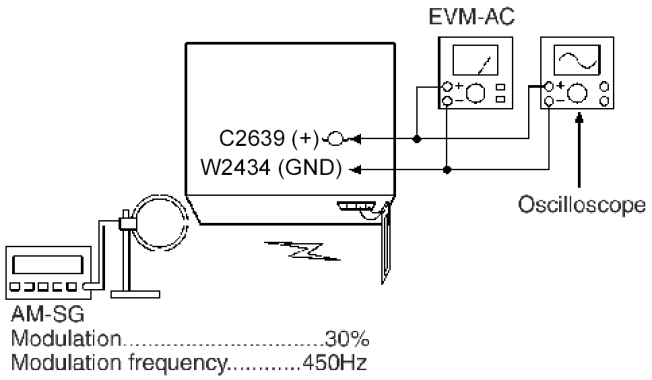


Fig.5

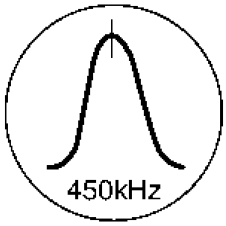


Fig.6

14.2.2. AM RF Adjustment

1. Connect the instrument as shown in Fig. 7.
2. Set the unit to AM mode.
3. Set AM-SG to 520kHz.
4. Receive 520kHz in the unit.
5. Adjust Z2602 (OSC) so that the EVM-AC is maximized.
6. Set AM-SG to 600Hz.
7. Receive 600Hz in the unit.
8. Adjust Z2602 (ANT) so that the EVM-SG is maximized.
9. Set AM-SG to 520kHz.
10. Receive 520kHz in the unit.
11. Adjust L2602 (OSC) so that the EVM-DC value is with 1.1±0.5V.

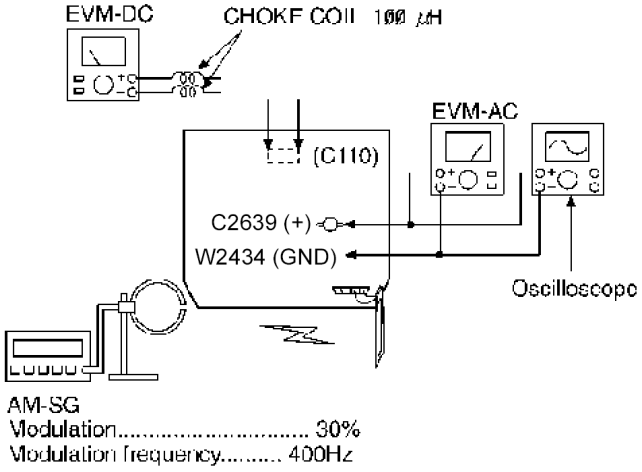
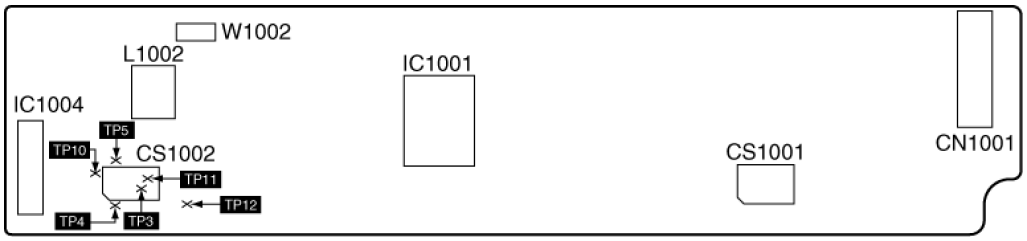


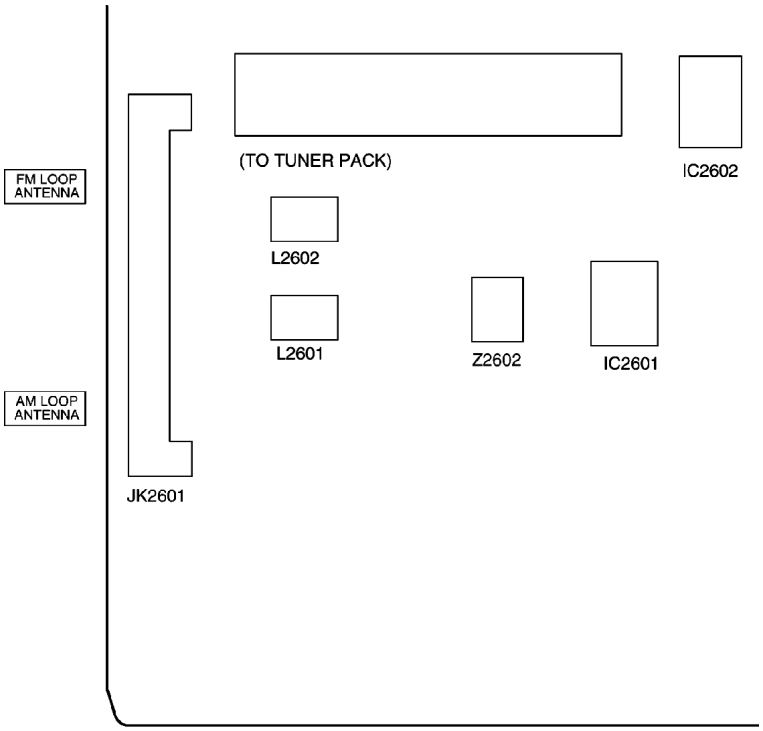
Fig.7

14.3. Alignment Points

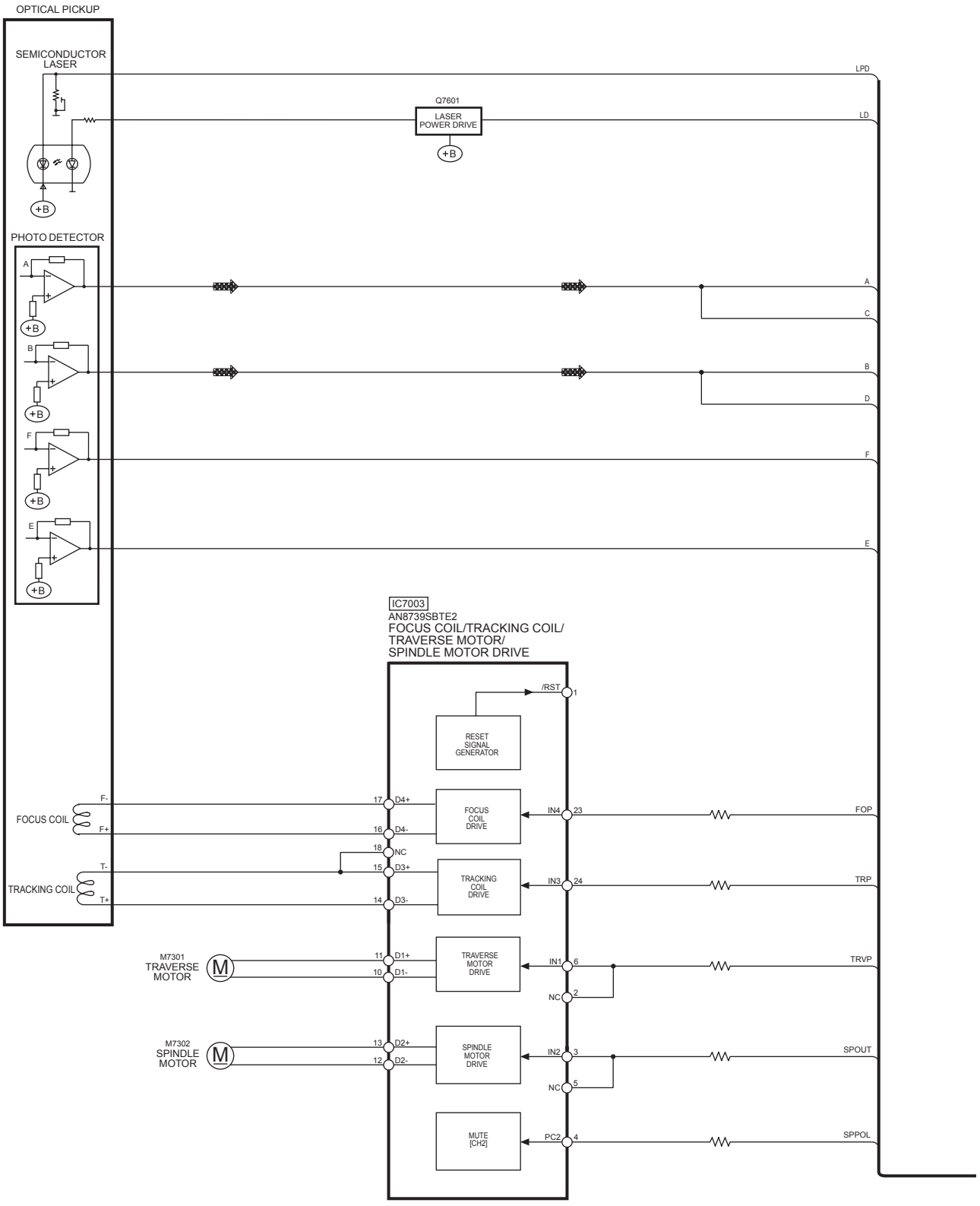
14.3.1. Cassette Deck Section

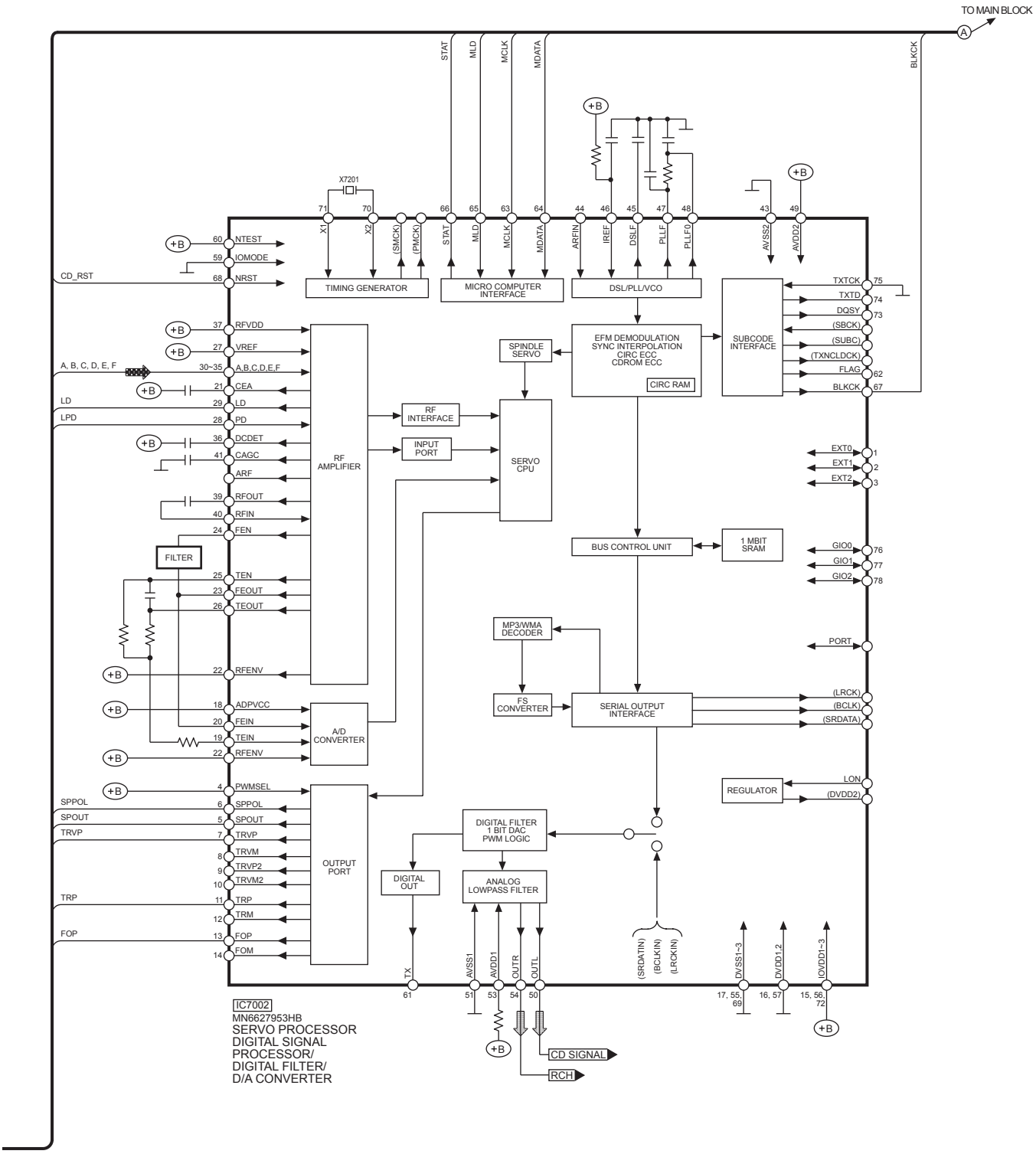


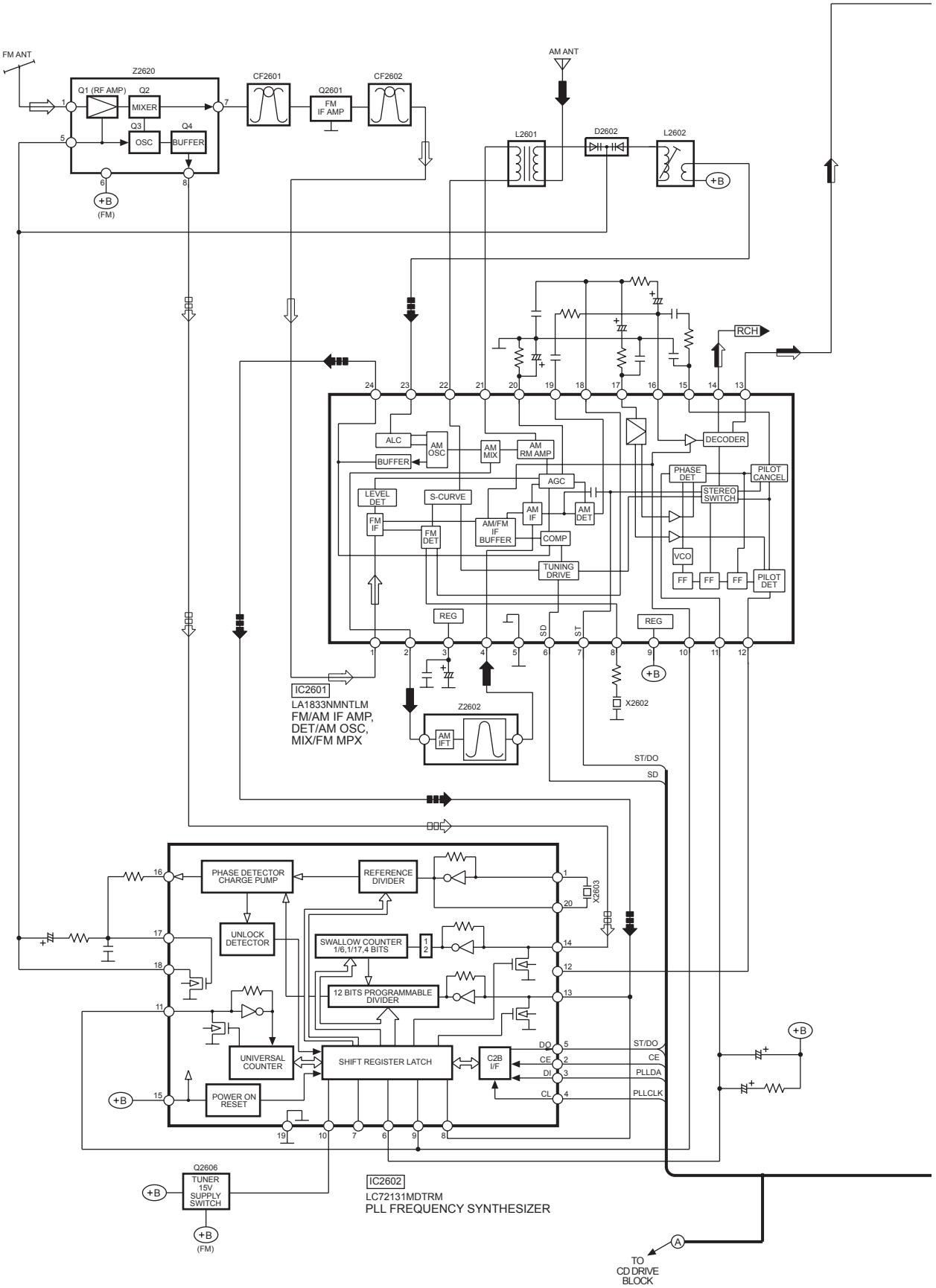
14.3.2. Tuner Section

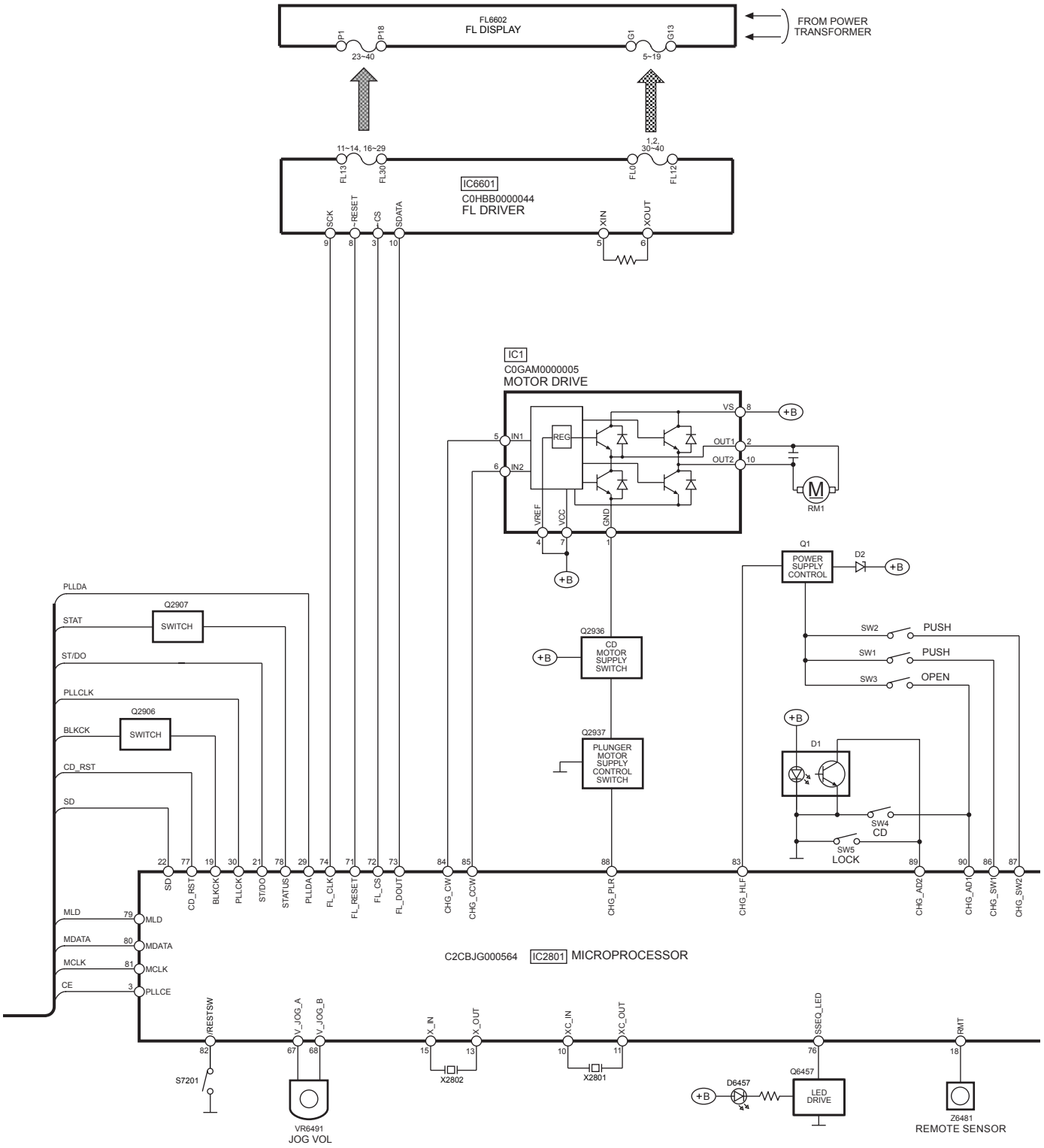


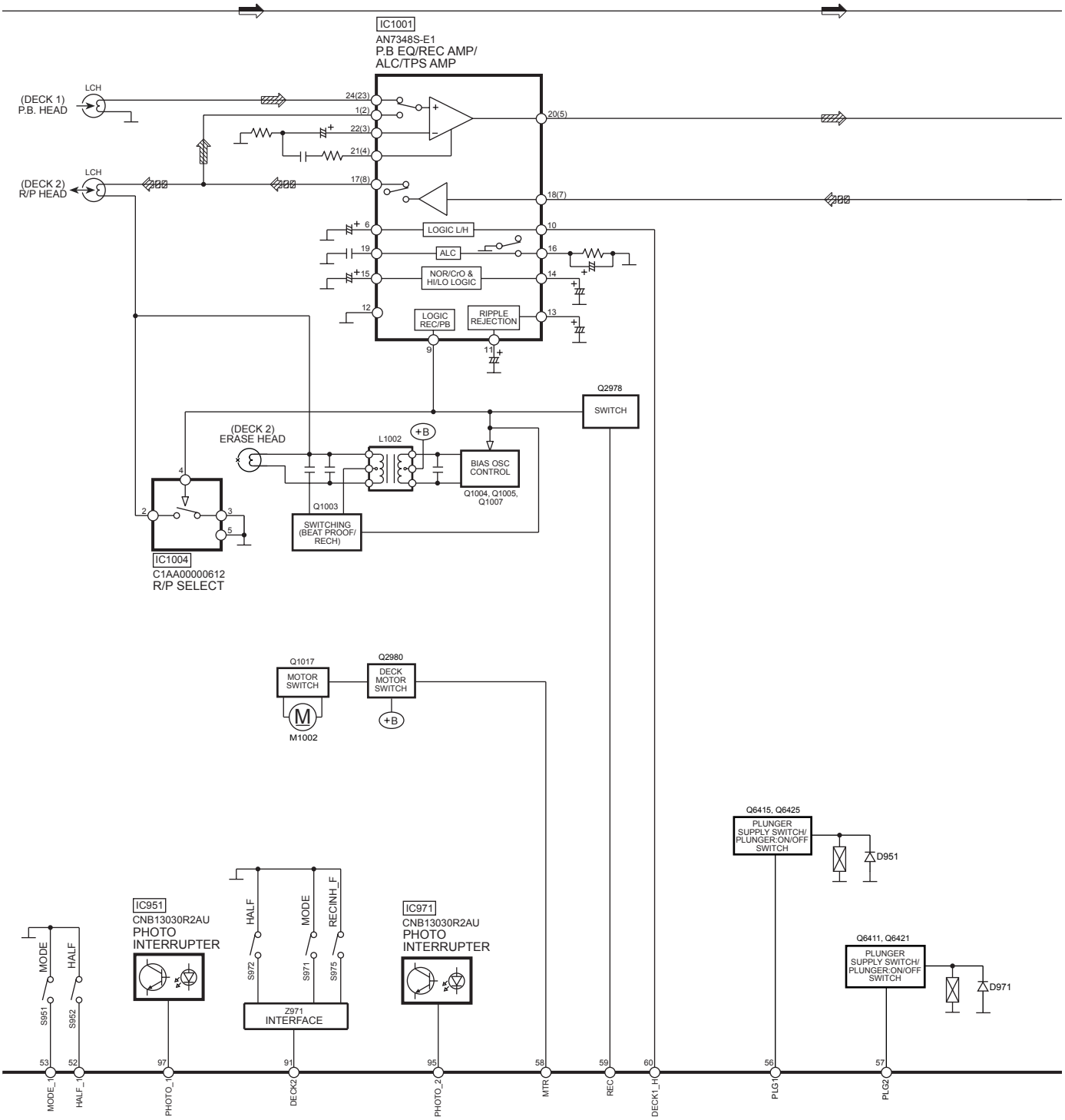
15 Block Diagram



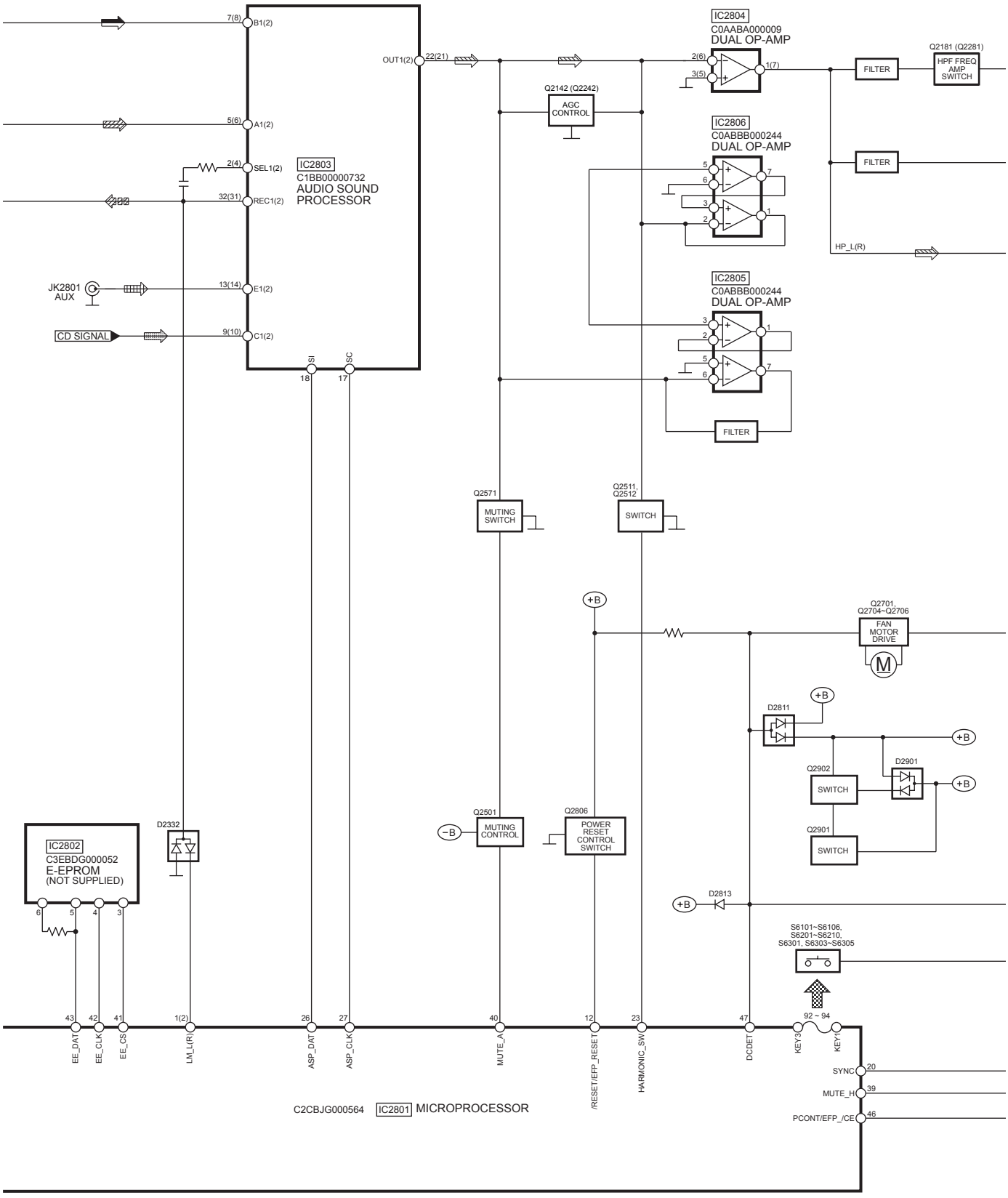

TO MAIN BLOCK
A
BLKCK
STAT
MLD
MCLK
MDATA
+B
X7201
71
70
66
65
63
64
44
46
45
47
48
43
49
X1
X2
(SMCK)
(PMCK)
STAT
MLD
MCLK
MDATA
ARFIN
IREF
DSLF
PLLF
PLLF0
AVSS2
AVDD2
TIMING GENERATOR
MICRO COMPUTER INTERFACE
DSL/PLL/VCO
SUBCODE INTERFACE
TXTCK
TXTD
DQSY
(SBCK)
(SUBC)
(TXNCLDCK)
FLAG
BLKCK
75
74
73
62
67
CD_RST
60 NTEST
59 IOMODE
68 NRST
37 RFVDD
27 VREF
30~35 A,B,C,D,E,F
21 CEA
29 LD
28 PD
36 DCDET
41 CAGC
ARF
39 RFOUT
40 RFIN
24 FEN
A, B, C, D, E, F
LD
LPD
FILTER
25 TEN
23 FEOUT
26 TEOUT
22 RFENV
18 ADPVCC
20 FEIN
19 TEIN
22 RFENV
4 PWMSEL
6 SPPOL
5 SPOUT
7 TRVP
8 TRVM
9 TRVP2
10 TRVM2
11 TRP
12 TRM
13 FOP
14 FOM
SPPOL
SPOUT
TRVP
TRP
FOP
RF AMPLIFIER
A/D CONVERTER
OUTPUT PORT
RF INTERFACE
INPUT PORT
SERVO CPU
SPINDLE SERVO
EFM DEMODULATION
SYNC INTERPOLATION
CIRC ECC
CDROM ECC
CIRC RAM
BUS CONTROL UNIT
1 MBIT SRAM
MP3/WMA DECODER
FS CONVERTER
SERIAL OUTPUT INTERFACE
REGULATOR
LON
(DVDD2)
(LRCK)
(BCLK)
(SRDATA)
PORT
EXT0
EXT1
EXT2
1
2
3
GIO0
GIO1
GIO2
76
77
78
DIGITAL FILTER
1 BIT DAC
PWM LOGIC
DIGITAL OUT
ANALOG LOWPASS FILTER
TX
61
AVSS1
51
AVDD1
53
OUTR
54
OUTL
50
(SRDATIN)
(BCLKIN)
(LRCKIN)
DVSS1~3
17, 55, 69
DVDD1,2
16, 57
IOVDD1~3
15, 56, 72
IC7002
MN6627953HB
SERVO PROCESSOR
DIGITAL SIGNAL
PROCESSOR/
DIGITAL FILTER/
D/A CONVERTER
CD SIGNAL
RCH

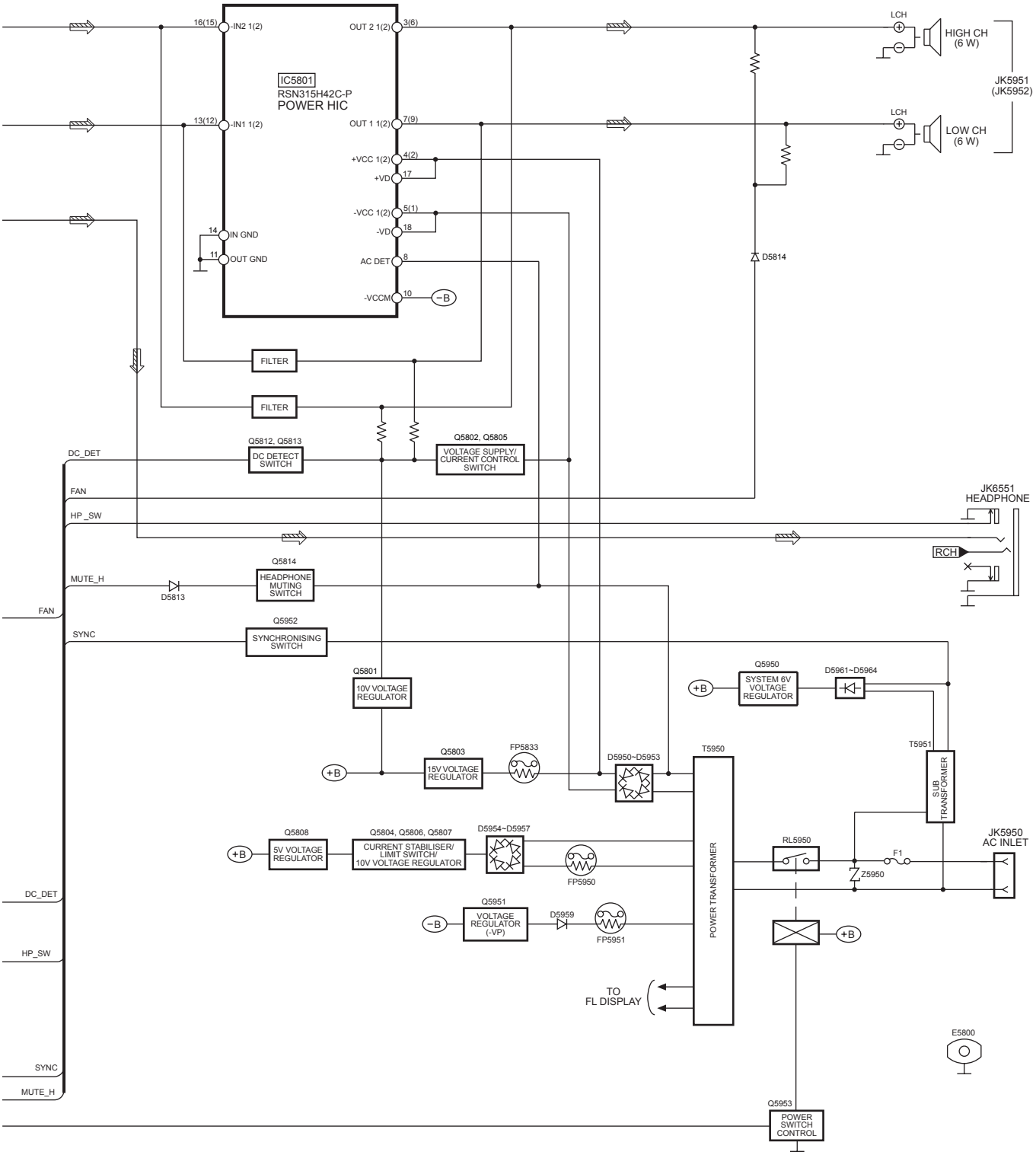

FM ANT
Z2620
Q1 (RF AMP)
Q2
MIXER
Q3
OSC
Q4
BUFFER
+B
(FM)
CF2601
Q2601
FM IF AMP
CF2602
AM ANT
L2601
D2602
L2602
+B
RCH
ALC
AM OSC
BUFFER
AM MIX
AM RM AMP
DECODER
PHASE DET
PILOT CANCEL
STEREO SWITCH
AGC
LEVEL DET
S-CURVE
FM IF
FM DET
AM/FM IF BUFFER
AM IF
AM DET
COMP
VCO
TUNING DRIVE
FF
FF
FF
PILOT DET
REG
REG
SD
ST
+B
X2602
IC2601
LA1833NMNTLM
FM/AM IF AMP,
DET/AM OSC,
MIX/FM MPX
Z2602
AM IFT
ST/DO
SD
PHASE DETECTOR CHARGE PUMP
REFERENCE DIVIDER
X2603
UNLOCK DETECTOR
SWALLOW COUNTER 1/6,1/17,4 BITS
12 BITS PROGRAMMABLE DIVIDER
UNIVERSAL COUNTER
SHIFT REGISTER LATCH
C2B I/F
POWER ON RESET
+B
DO
CE
DI
CL
ST/DO
CE
PLLDA
PLLCLK
+B
Q2606
TUNER 15V SUPPLY SWITCH
+B
+B
(FM)
IC2602
LC72131MDTRM
PLL FREQUENCY SYNTHESIZER
A
TO CD DRIVE BLOCK


FL6602
FL DISPLAY
P1
P18
23~40
G1
G13
5~19
FROM POWER TRANSFORMER
11~14, 16~29
FL13
FL30
1,2,
30~40
FL0
FL12
IC6601
C0HBB0000044
FL DRIVER
SCK
~RESET
CS
SDATA
XIN
XOUT
IC1
C0GAM0000005
MOTOR DRIVE
VS
+B
IN1
IN2
REG
OUT1
OUT2
M
RM1
VREF
VCC
GND
Q1
POWER SUPPLY CONTROL
D2
Q2907
SWITCH
Q2906
SWITCH
Q2936
CD MOTOR SUPPLY SWITCH
Q2937
PLUNGER MOTOR SUPPLY CONTROL SWITCH
SW2
PUSH
SW1
PUSH
SW3
OPEN
D1
SW4
CD
SW5
LOCK
PLLDA
STAT
ST/DO
PLLCLK
BLKCK
CD_RST
SD
MLD
MDATA
MCLK
CE
SD
CD_RST
BLKCK
PLLCK
ST/DO
STATUS
PLLDA
FL_CLK
FL_RESET
FL_CS
FL_DOUT
CHG_CW
CHG_CCW
CHG_PLR
CHG_HLF
CHG_AD2
CHG_AD1
CHG_SW1
CHG_SW2
C2CBJG000564
IC2801
MICROPROCESSOR
/RESTSW
V_JOG_A
V_JOG_B
X_IN
X_OUT
XC_IN
XC_OUT
SSEQ_LED
RMT
S7201
X2802
X2801
D6457
Q6457
LED DRIVE
VR6491
JOG VOL
Z6481
REMOTE SENSOR



C2CBJG000564 IC2801 MICROPROCESSOR


IC2803
C1BB00000732
AUDIO SOUND
PROCESSOR
IC2804
C0AABA000009
DUAL OP-AMP
IC2806
C0ABBB000244
DUAL OP-AMP
IC2805
C0ABBB000244
DUAL OP-AMP
IC2802
C3EBDG000052
E-EPROM
(NOT SUPPLIED)
C2CBJG000564 IC2801 MICROPROCESSOR
AGC CONTROL
Q2142 (Q2242)
FILTER
HPF FREQ AMP SWITCH
Q2181 (Q2281)
HP_L(R)
JK2801 AUX
CD SIGNAL
MUTING SWITCH
Q2571
SWITCH
Q2511, Q2512
FAN MOTOR DRIVE
Q2701, Q2704~Q2706
D2811
D2901
Q2902
Q2901
MUTING CONTROL
Q2501
POWER RESET CONTROL SWITCH
Q2806
D2332
D2813
S6101~S6106, S6201~S6210, S6301, S6303~S6305
EE_DAT
EE_CLK
EE_CS
LM_L(R)
ASP_DAT
ASP_CLK
MUTE_A
/RESET/EFP_RESET
HARMONIC_SW
DCDET
KEY2
KEY1
92 ~ 94
SYNC
MUTE_H
PCONT/EFP_/CE



SIGNAL LINES

: MAIN SIGNAL LINE	: CD SIGNAL LINE	: AM SIGNAL LINE	: PLAYBACK SIGNAL LINE
: FM OSC SIGNAL LINE	: AM OSC SIGNAL LINE	: FM/AM SIGNAL LINE	: RECORD SIGNAL LINE
: FM SIGNAL LINE	: AUX SIGNAL LINE	: CD-DA (AUDIO/VIDEO) SIGNAL LINE	

( ) Indicates the Pin No. of Right Channel.

NOTE : Signal Lines are applicable to the Left Channel only.

16 Voltage Measurement

Main P.C.B.

Ref No.	IC2601																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	1.98	5.95	1.99	1.98	0	4.90	5.17	3.82	5.95	0	4.87	3.52	1.604	1.6	1.93	1.99	1.984	2.21	0	0.125
PLAY	1.98	5.95	1.99	1.97	0	4.74	5.15	3.82	5.95	0	4.86	3.52	1.59	1.595	1.93	1.989	1.981	2.20	0	0.125
STOP	1.99	5.96	1.99	1.98	0	4.92	5.17	3.83	5.95	0	4.87	3.52	1.59	1.6	1.93	1.99	1.981	2.20	0	0.125

Ref No.	IC2601																			
MODE	21	22	23	24																
REC	2.357	2.357	5.95	4.57																
PLAY	2.35	2.35	5.95	4.56																
STOP	2.35	2.35	5.95	4.57																

Ref No.	IC2602																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	2.59	0	0	0	5.18	4.95	0	4.63	0	14.94	0	0	2.59	0	5.19	0	0	14.94	0	2.59
PLAY	2.57	0	0	0	5.16	4.86	0	4.55	0	15.18	0	0	2.59	5.19	5.19	0	0	15.23	0	2.58
STOP	2.57	0	0	0	5.16	4.86	0	4.55	0	15.18	0	0	2.59	5.19	5.19	0	0	15.23	0	2.58

Ref No.	IC2801																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	0	0	0	0	0	0	0	0	0	0.669	0.69	5.25	2.68	0	2.6	0	0	5.25	3.1	5.20
PLAY	0	0	0	0	0	0	0	0	0	0.67	0.68	5.25	2.68	0	2.6	0	0	5.224	3.1	5.20
STOP	0	0	0	0	0	0	0	0	0	0.67	0.67	5.25	2.68	0	2.62	0	0	5.224	3.1	5.20

Ref No.	IC2801																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REC	4.95	0	0	0	0	0	5.28	0	0	0	0	0	0	0	0	0	0	0	0	0
PLAY	4.95	0	0	0	0	0	5.26	0	0	0	0	0	0	0	0	0	0	0	0	0
STOP	4.95	0	0	0	0	0	5.26	0	0	0	0	0	0	0	0	0	0	5.224	0	0

Ref No.	IC2801																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
REC	0	0	0	0	0	5.18	5.16	0	0	0	0	0	4.79	0	0	0	0	0	5.25	0
PLAY	0	0	0	0	0	5.17	5.15	0	0	0	0	0	4.78	0	0	0	0	0	5.25	0
STOP	0	0	0	0	0	5.18	5.15	0	0	0	0	0	4.79	0	0	0	0	0	5.25	0

Ref No.	IC2801																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
REC	0	5.25	0	0	0	0	0	5.25	0	0	0	3.0	0.3	0	0	0	5.25	3.0	0	0.5
PLAY	0	5.25	0	0	0	0	0	5.25	0	0	0	3.0	0.31	0	0	0	5.25	3.0	0	0.5
STOP	0	5.25	0	0	0	0	0	5.25	0	0	0	3.1	0.3	0	0	0	5.25	3.1	0	0.5

Ref No.	IC2801																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
REC	4.91	0	0	5.24	5.25	0	0	0	0	3.65	5.25	1.24	5.25	5.23	4.38	0.59	0	5.25	5.25	5.18
PLAY	4.91	0	0	5.25	5.25	0	0	0	0	3.65	5.22	1.24	5.25	5.23	4.38	0.58	0	5.25	5.26	5.18
STOP	4.92	0	0	5.25	5.25	0	0	0	0	3.65	5.24	1.24	5.25	5.23	4.38	0.59	0	5.25	5.25	5.19

Ref No.	IC2803																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	4.52	4.60	4.52	4.60	4.50	4.49	4.49	4.49	4.50	4.50	4.49	4.49	4.49	4.45	4.54	0	5.17	0	9.03	3.38
PLAY	4.52	4.60	4.50	4.61	4.52	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.54	0	5.20	0	9.02	3.38
STOP	0	5.27	0	0	0	0	0	0												

Ref No.	IC2803																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32								
REC	4.54	4.54	4.54	4.52	4.52	4.51	4.54	4.53	4.54	4.53	4.54	4.55								
PLAY	4.54	4.55	4.55	4.53	4.52	4.51	4.54	4.53	4.54	4.54	4.54	4.55								
STOP	4.54	4.55	4.55	4.53	4.52	4.57	4.54	4.53	4.54	4.54	4.54	4.55								

Ref No.	IC2805																			
MODE	1	2	3	4	5	6	7	8												
REC	0	0	0	-8.89	0	0	0	9.03												
PLAY	0	0	0	-8.90	0	0	0	9.03												
STOP	0	0	0	-8.90	0	0	0	9.05												

Ref No.	IC2806																			
MODE	1	2	3	4	5	6	7	8												
REC	0	0	0	0	0	0	0	9.05												
PLAY	0	0	0	0	0	0	0	9.04												
STOP	0	0	0	0	0	0	0	9.05												

Main P.C.B.

Ref No.	Q2601				Q2606				Q2701				Q2901				Q2902			
MODE	E/S	C/D	B/G		E/S	C/D	B/G		E/S	C/D	B/G		E/S	C/D	B/G		E/S	C/D	B/G	
REC	0	0	0		14.79	0	14.79		-8.92	-8.84	-8.18		5.54	3.28	6.5		2.98	5.56	2.4	
PLAY	0	0	0		15.17	0	15.20		-8.92	-8.81	-8.17		5.60	3.29	6.24		3.02	5.58	2.48	
STOP	0	0	0		15.26	0	15.22		-8.96	4.78	-8.95		7.08	3.3	7.65		3.04	7.08	2.5	

Main P.C.B.

Ref No.	Q2936																			
MODE	E/S	C/D	B/G																	
PLAY	9.92	0	9.94																	
PLAY	9.95	0	9.95																	
STOP	9.99	0	9.99																	

Transformer P.C.B.

Ref No.	Q5950				Q5951				Q5952				Q5953							
MODE	E/S	C/D	B/G		E/S	C/D	B/G		E/S	C/D	B/G		E/S	C/D	B/G					
REC	5.98	10.12	6.60		-25.86	-29.20	-26.50		-8.92	-8.84	-8.18		0	0.13	0.8					
PLAY	5.99	10.30	6.59		-25.85	-29.22	-26.50		-8.92	-8.81	-8.17		0	0.13	0.8					
STOP	5.99	10.25	6.59		-25.85	-29.22	-26.50		-8.96	4.78	-8.95		0	0.13	0.8					

17 Schematic Diagram

(All schematic diagrams may be modified at any time with the development of the new technology)

Note:

SW1 : Push switch
SW2 : Push switch
SW3 : Open switch
SW4 : CD switch
SW5 : Load switch
S951 : Mode switch
S952 : Half switch
S971 : Mode switch
S972 : Half switch
S975 : Recinh_F switch
S6101 : Open/ Close switch
S6102 : CD 1 switch
S6103 : CD 2 switch
S6104 : CD 3 switch
S6105 : CD 4 switch
S6106 : CD 5 switch
S6201 : Rew switch
S6202 : Tuner switch
S6203 : CD switch
S6204 : FF switch
S6205 : Stop switch
S6206 : Deck 1/2 switch
S6207 : Deck 2 Open switch
S6208 : TAPE switch
S6209 : AUX switch
S6210 : Deck 1 Open switch
S6301 : Power switch
S6303 : SSEQ switch
S6304 : REC switch
S6305 : Demo/Display switch
S7201 : Rest switch
VR6491 : VR Volume Jog

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveformsdepending upon the internal impedance of the tester or the measuring unit.

No mark : Playback << >> : Rec < > : FM
(( )) : CD

- **Importance safety notice :**

  Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer´s specified parts shown in the parts list.

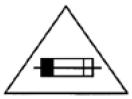
Caution !

IC, LSI and VLSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminium foil.
- Put a conductive mat on the work table.
- Ground the soldering iron.
- Do not touch the pins of IC, LSI or VLSI with fingers directly.

CAUTION : FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE **F1, 4A, 125V FUSE.**



RISK OF FIRE-REPLACE FUSE AS MARKED.

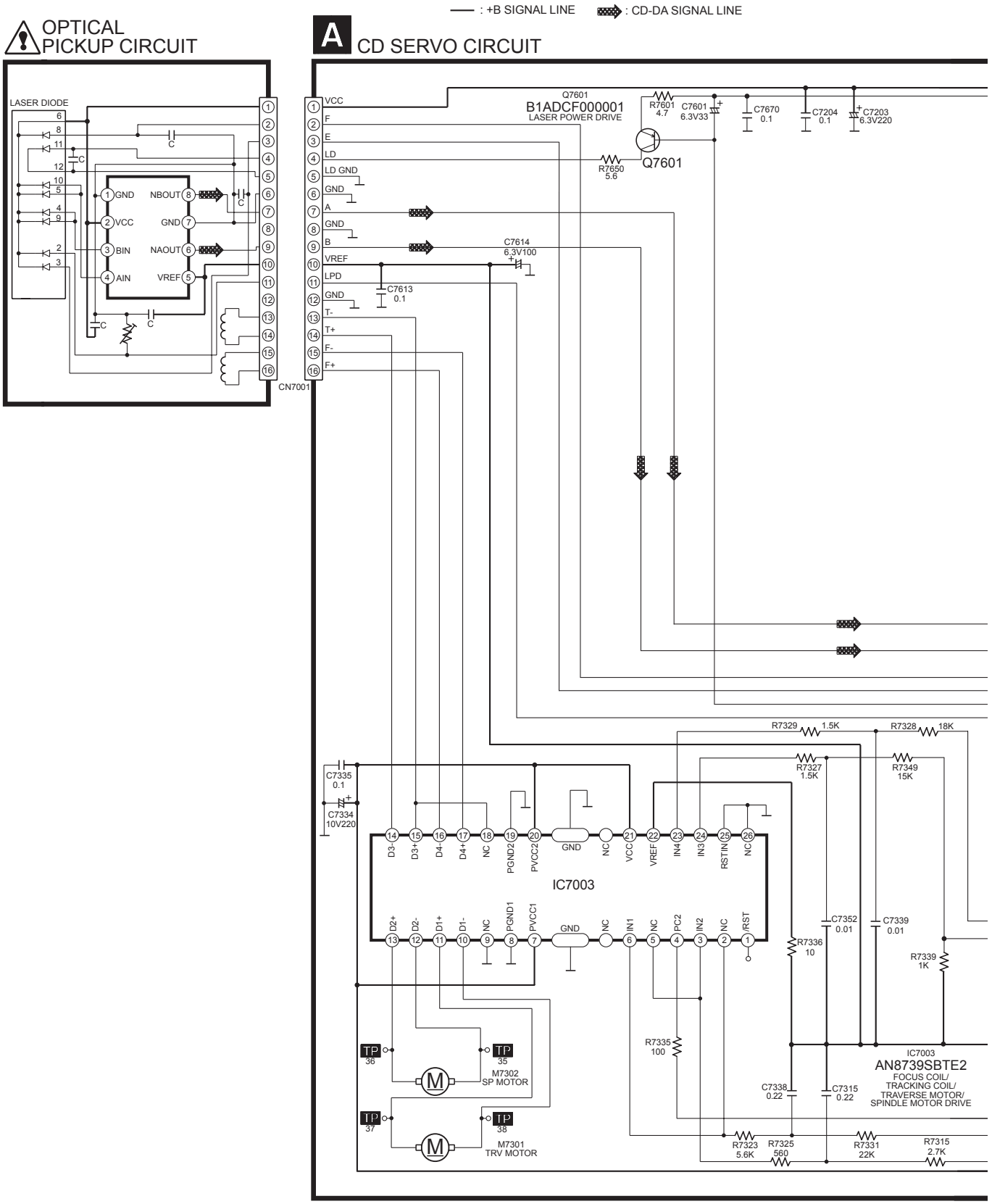
FUSE CAUTION

These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire harzard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

Ce symbole indique que le fusible utilisé est à rapide. Pour une protection permanente, n' utiliser que des fusibles de même type. Ce dernier est indiqué là qù le présent symbole est apposé.

17.1. (A) CD Servo Circuit

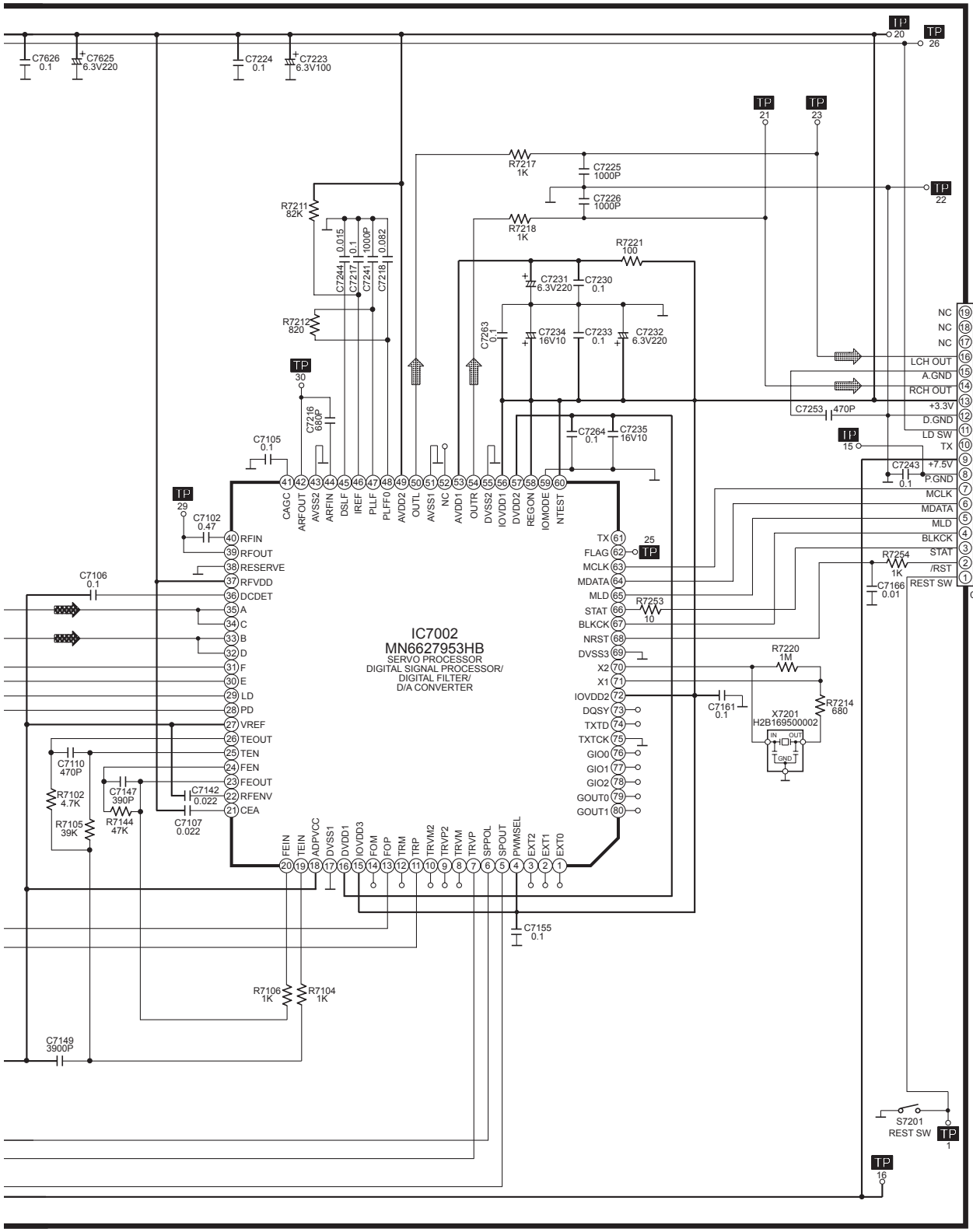
SCHEMATIC DIAGRAM - 1



SCHEMATIC DIAGRAM - 2

—— : +B SIGNAL LINE : CD-DA SIGNAL LINE : CD SIGNAL LINE

A CD SERVO CIRCUIT



17.2. (B) Main (Tuner) Circuit

SCHEMATIC DIAGRAM - 3

: +B SIGNAL LINE
: FM/AM SIGNAL LINE
: FM SIGNAL LINE
: FM OSC SIGNAL LINE
: AM SIGNAL LINE
: AM OSC SIGNAL LINE

B MAIN(TUNER) CIRCUIT

K TUNER PACK CIRCUIT Z2620 (RAL0029)

FM EXT ANT
75 OHM
GND
AM LOOP ANT
AM EXT ANT
JK2601

2SK544
2SC2786M
2SC1675I1I2
2SC2787FL1TA
CF2601 J0B1075A0061
CF2602 J0B1075A0061

Q2601
B1AABC000003
FM IF AMP

Q2606
B1GCCFJJ0015
TUNER 15V SUPPLY SWITCH

D2602 B0CDBBB000015
L2601 SLI2B101-T
L2602 P7003BCS-A08

IC2601
LA1833NMNTLM
FM/AM IF AMP
DET/AM OSC MIX/
FM MPX

OSC OUT, OSC, AFC, AM RF IN, AGC, AM OUT, DET OUT, PILOT IN, MPX IN, PILOT OUT, RCH, LCH
FM IF IN, AM MIX OUT, REG, AM IF IN, GND, SD, ST, FM DET, VCC, STRQ, FM/AM, MONO

Z2602
G2BAD0000003

X2602
H3F1065A0002

D2601
B0BC5R000009

IC2602
LC72131MDTRM
PLL FREQUENCY SYNTHESIZER

XOUT, VSS, AOUT, AIN, PD, VDD, FMIN, AMIN, MONO, IFIN
XIN, CE, DI, CL, DO, AM, LW, SDC, STRQ, FM

X2603
H0H720400005

TO B MAIN CIRCUIT (2A) ON SCHEMATIC DIAGRAM-8
TGND
15V
DO/ST
SD
+7.5V
1A

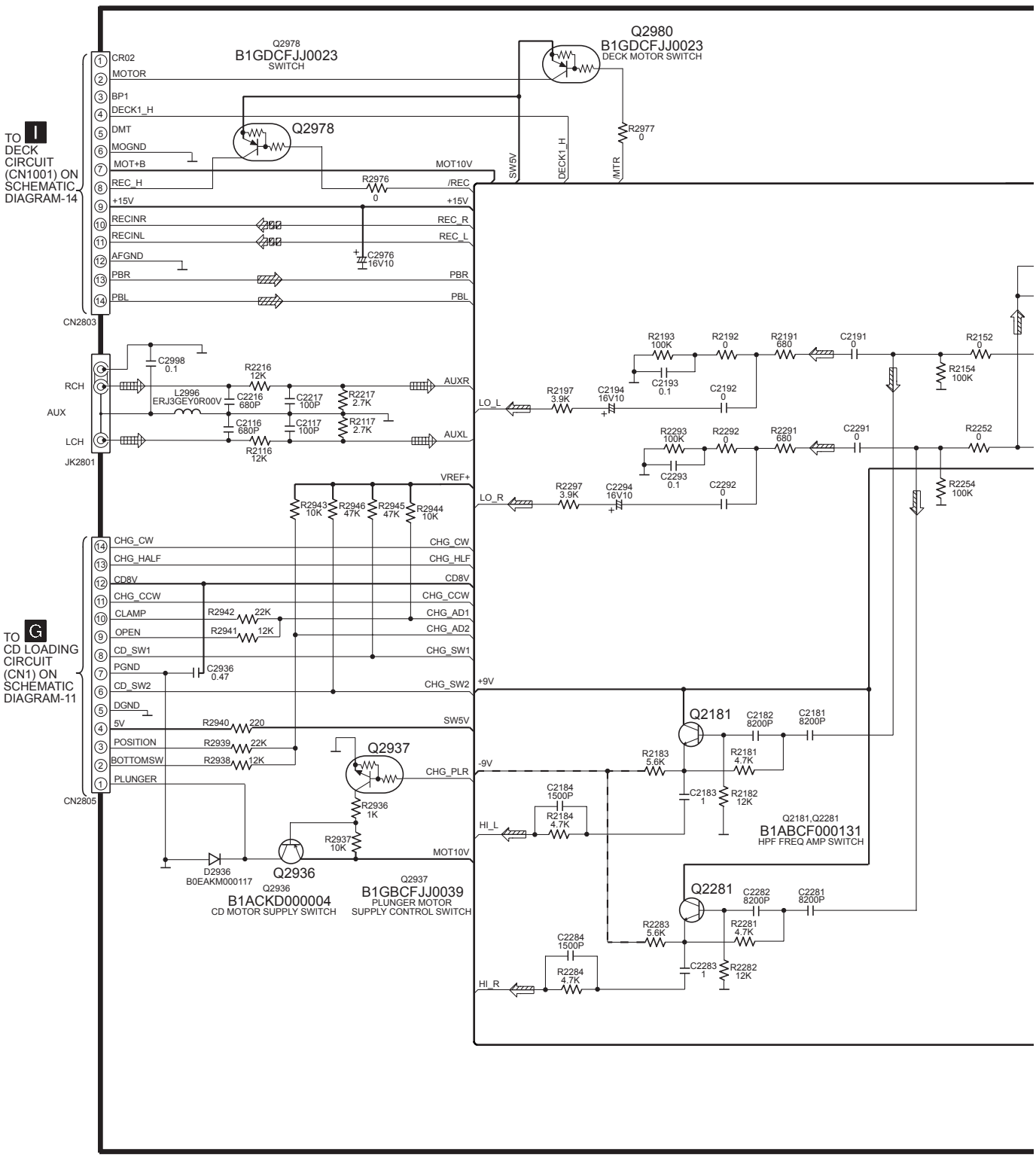
TO B MAIN CIRCUIT (2B) ON SCHEMATIC DIAGRAM-8
RCH
CE
LCH
PLLDA
DO/ST
PLLCLK
1B

17.3. (B) Main Circuit

SCHEMATIC DIAGRAM - 4

: +B SIGNAL LINE : PLAYBACK SIGNAL LINE : AUX SIGNAL LINE
: -B SIGNAL LINE : RECORD SIGNAL LINE : MAIN SIGNAL LINE

B MAIN CIRCUIT

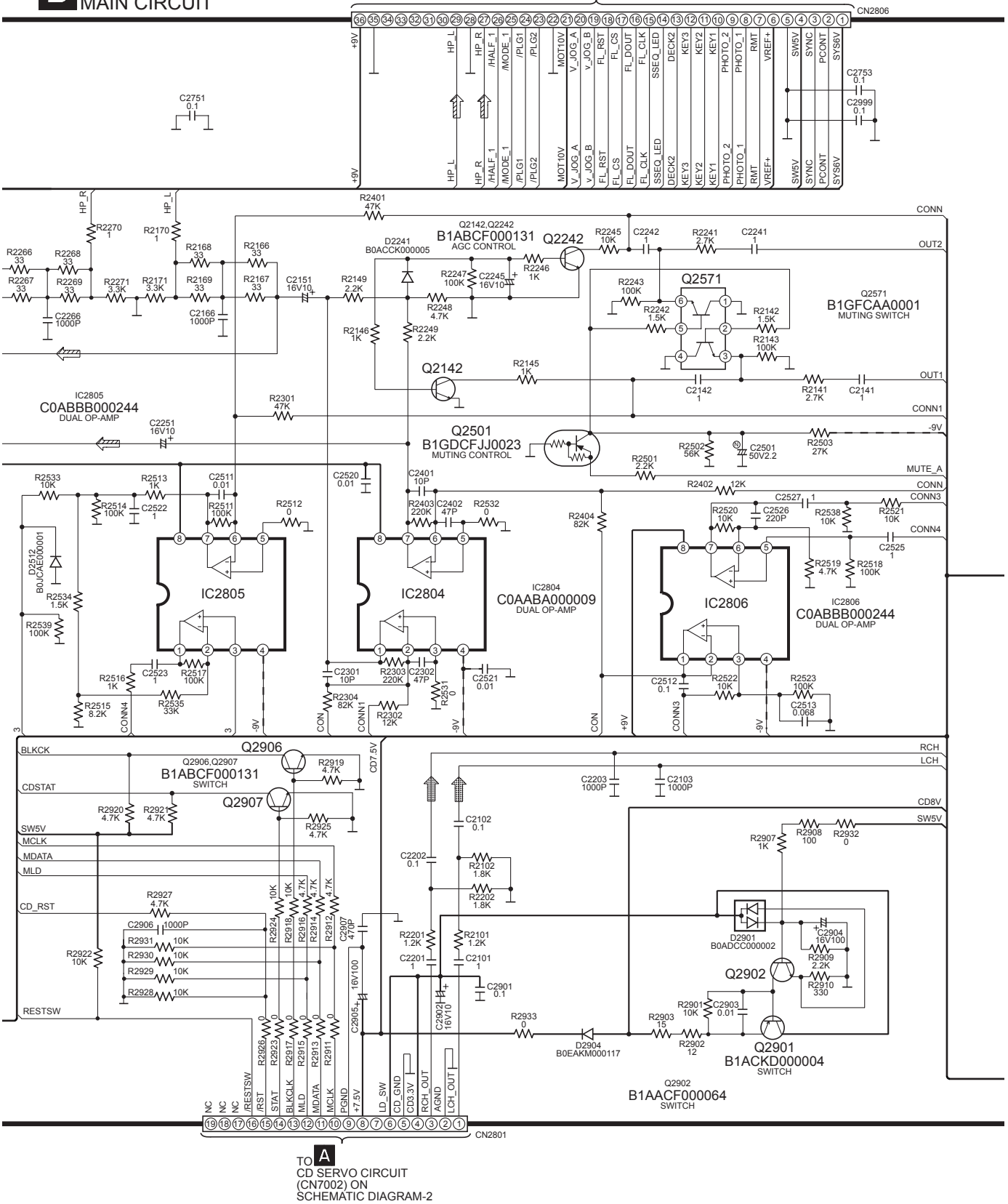


SCHEMATIC DIAGRAM - 5

: +B SIGNAL LINE
: -B SIGNAL LINE
: CD SIGNAL LINE
: MAIN SIGNAL LINE

B MAIN CIRCUIT

TO **C**
PANEL CIRCUIT
(CN6601) ON
SCHEMATIC DIAGRAM-10

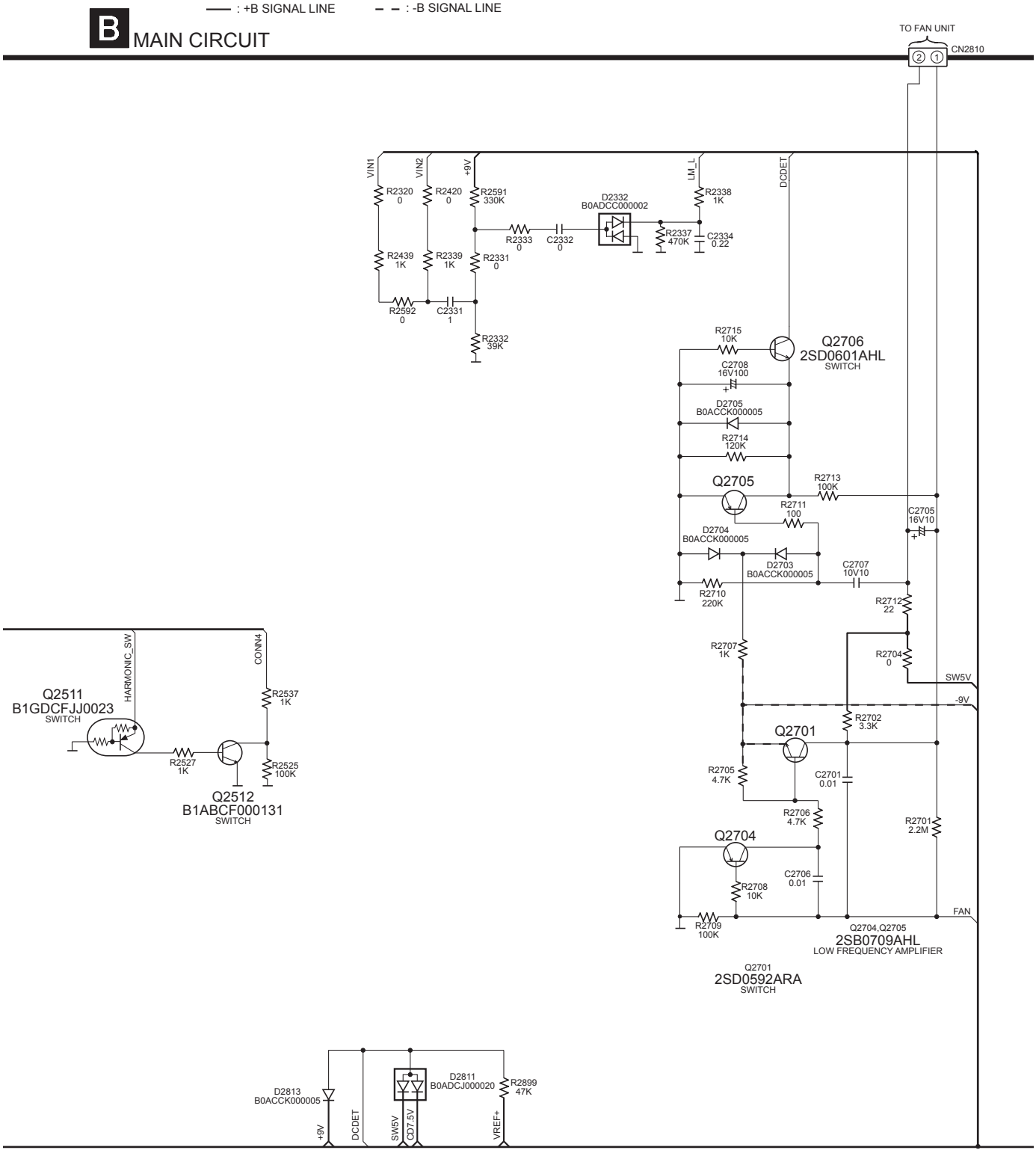


TO **A**
CD SERVO CIRCUIT
(CN7002) ON
SCHEMATIC DIAGRAM-2

SCHEMATIC DIAGRAM - 6

—— : +B SIGNAL LINE – – : -B SIGNAL LINE

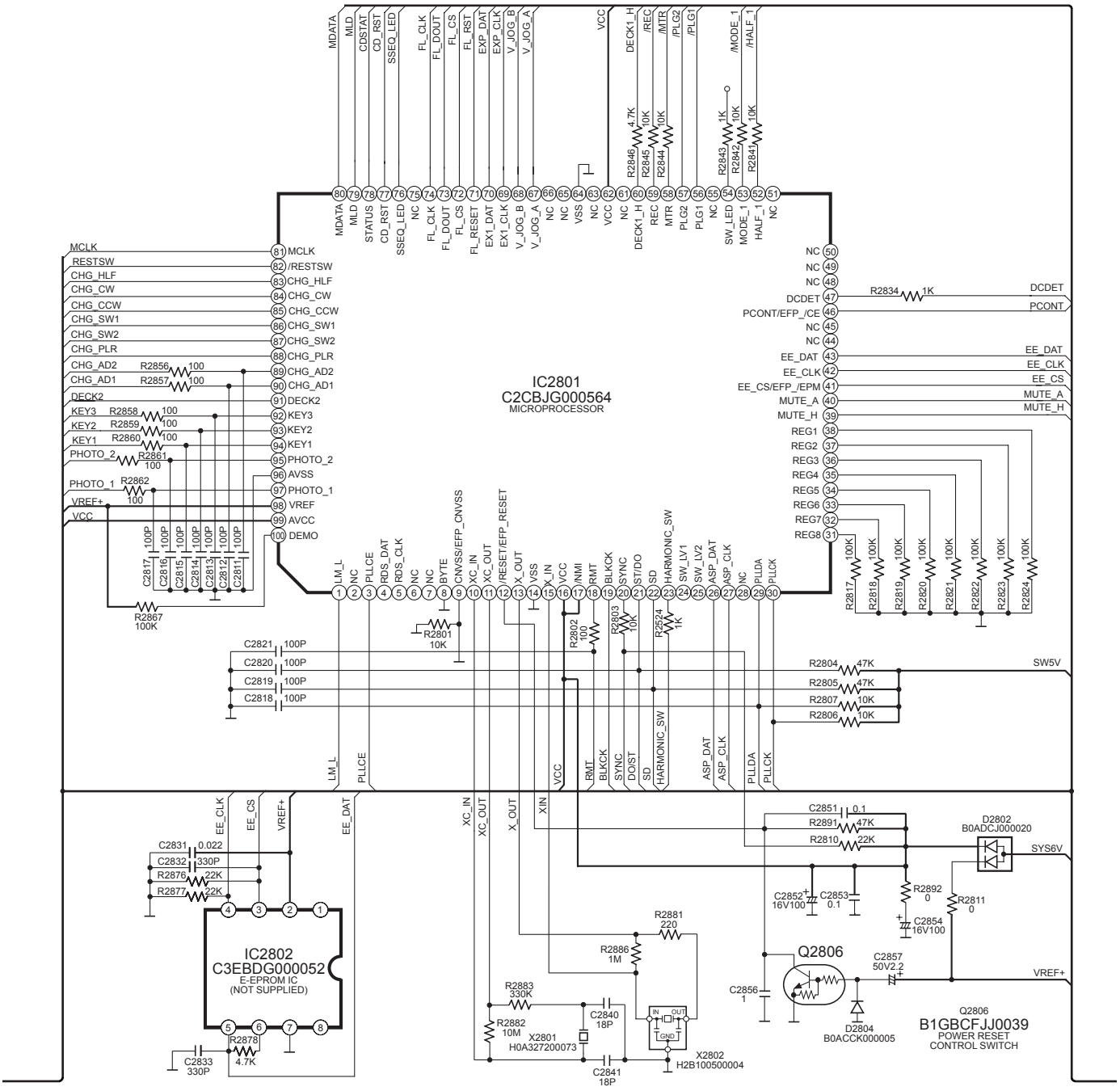
B MAIN CIRCUIT



SCHEMATIC DIAGRAM - 7

B MAIN CIRCUIT

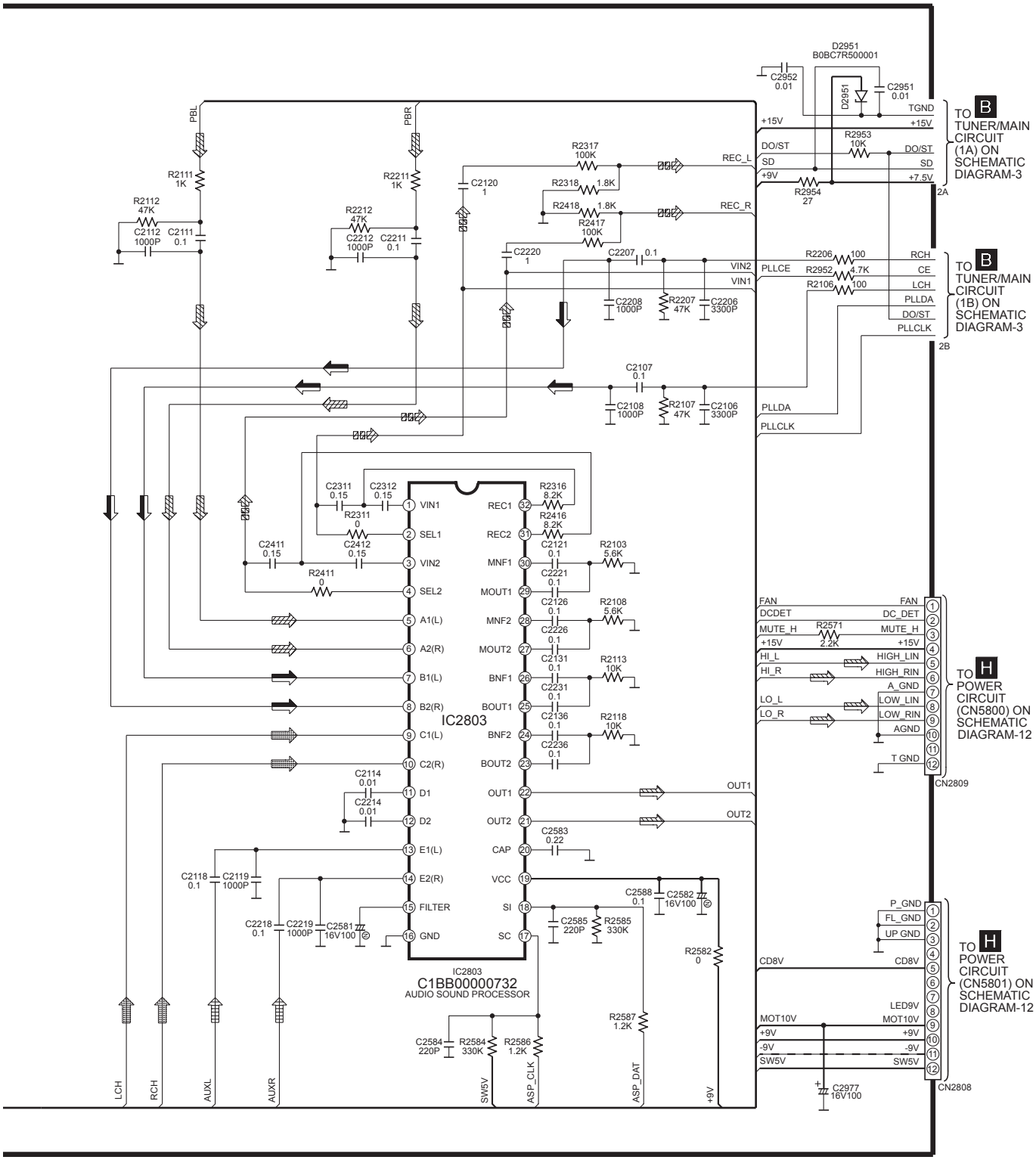
—— : +B SIGNAL LINE



SCHEMATIC DIAGRAM - 8

: +B SIGNAL LINE
: -B SIGNAL LINE
: AUX SIGNAL LINE
: CD SIGNAL LINE
: FM/AM SIGNAL LINE
: MAIN SIGNAL LINE
: PLAYBACK SIGNAL LINE
: RECORD SIGNAL LINE

B MAIN CIRCUIT

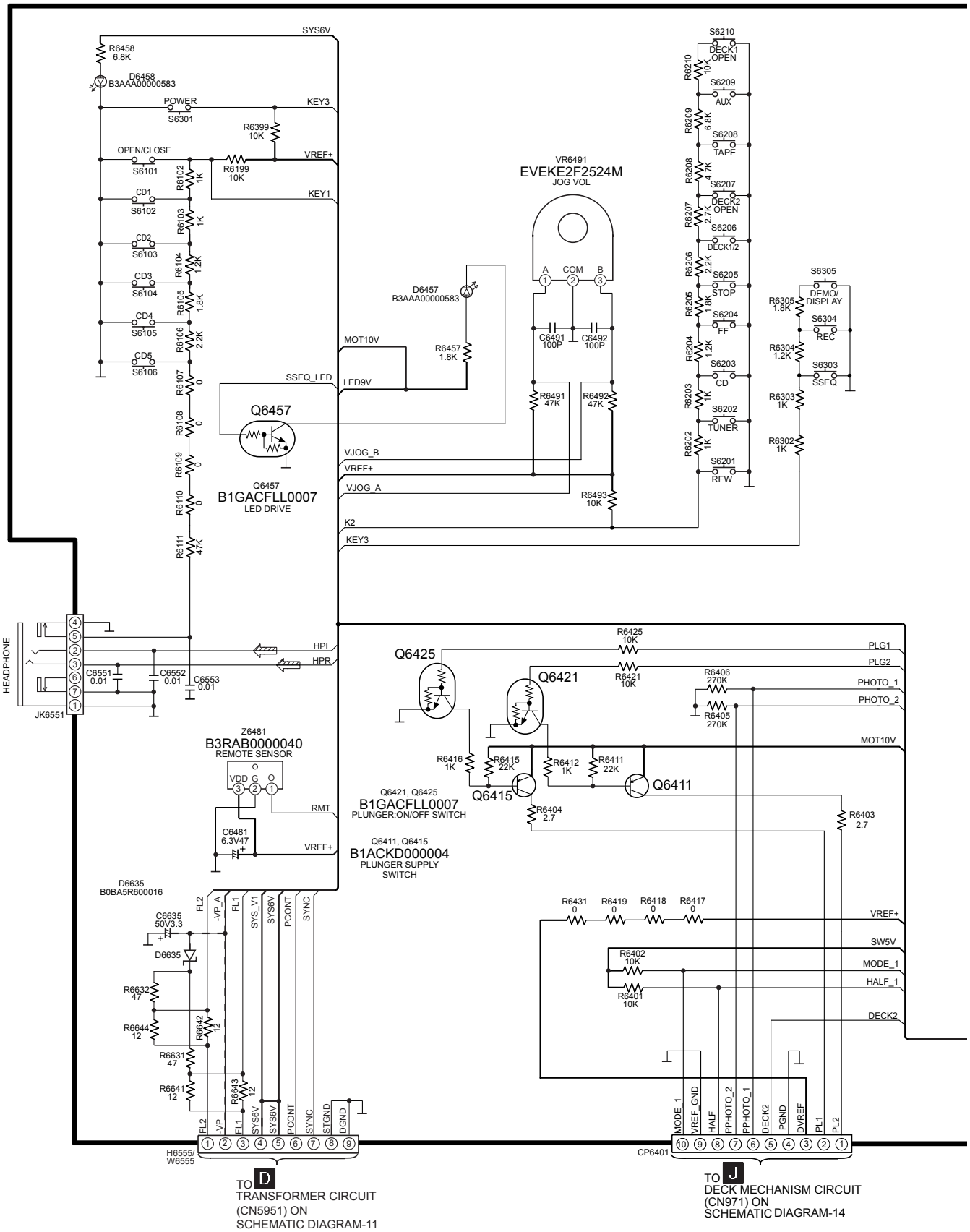


17.4. (C) Panel Circuit

SCHEMATIC DIAGRAM - 9

C PANEL CIRCUIT

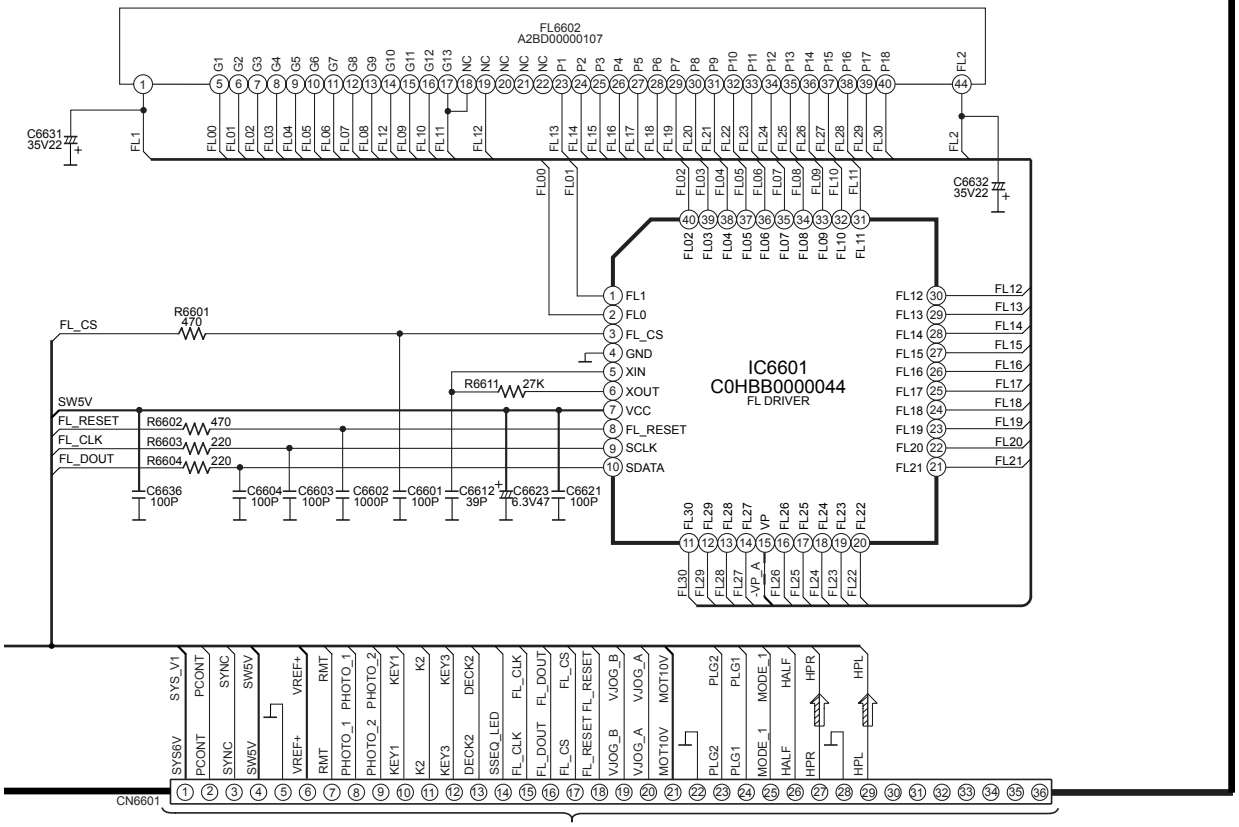
—— : +B SIGNAL LINE
– – : -B SIGNAL LINE
⇒ : MAIN SIGNAL LINE



SCHEMATIC DIAGRAM - 10

—— : +B SIGNAL LINE – – : -B SIGNAL LINE ⇒ : MAIN SIGNAL LINE

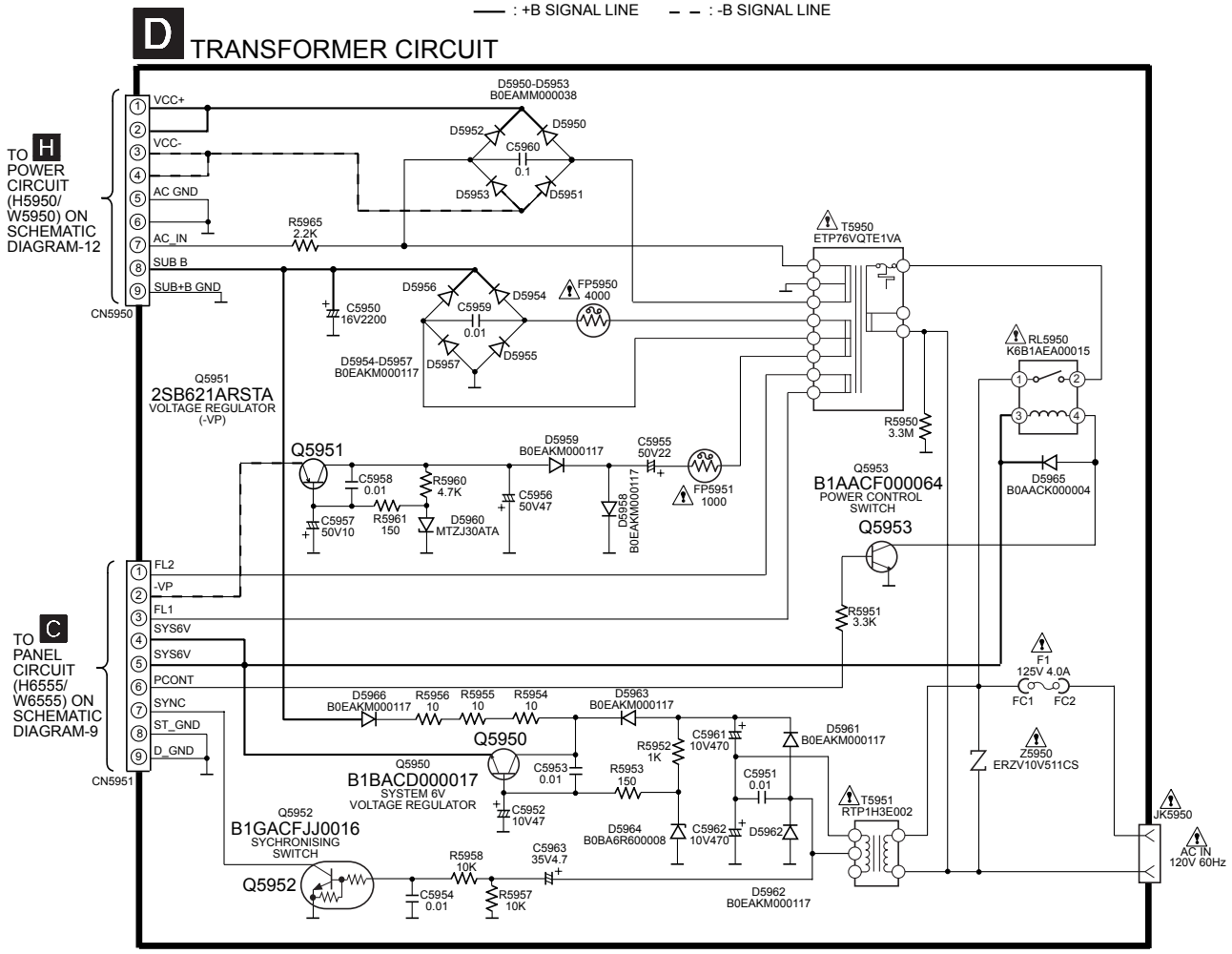
C PANEL CIRCUIT

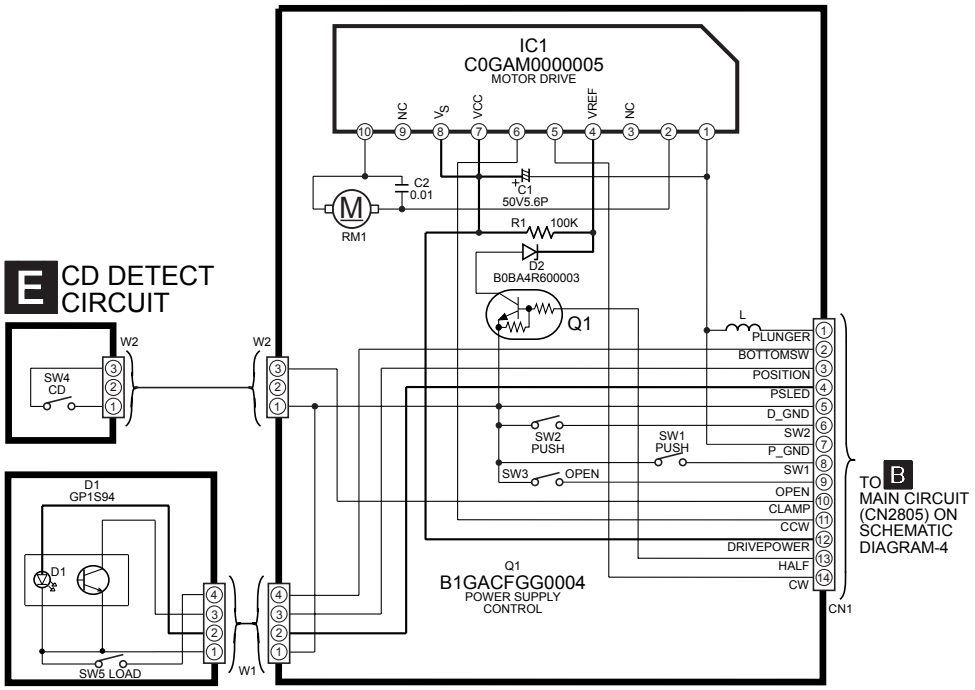


17.5. (D) Transformer Circuit, (E) CD Detect Circuit, (F) Spindle Position Circuit & (G) CD Loading Circuit

SCHEMATIC DIAGRAM - 11

—— : +B SIGNAL LINE – – : -B SIGNAL LINE



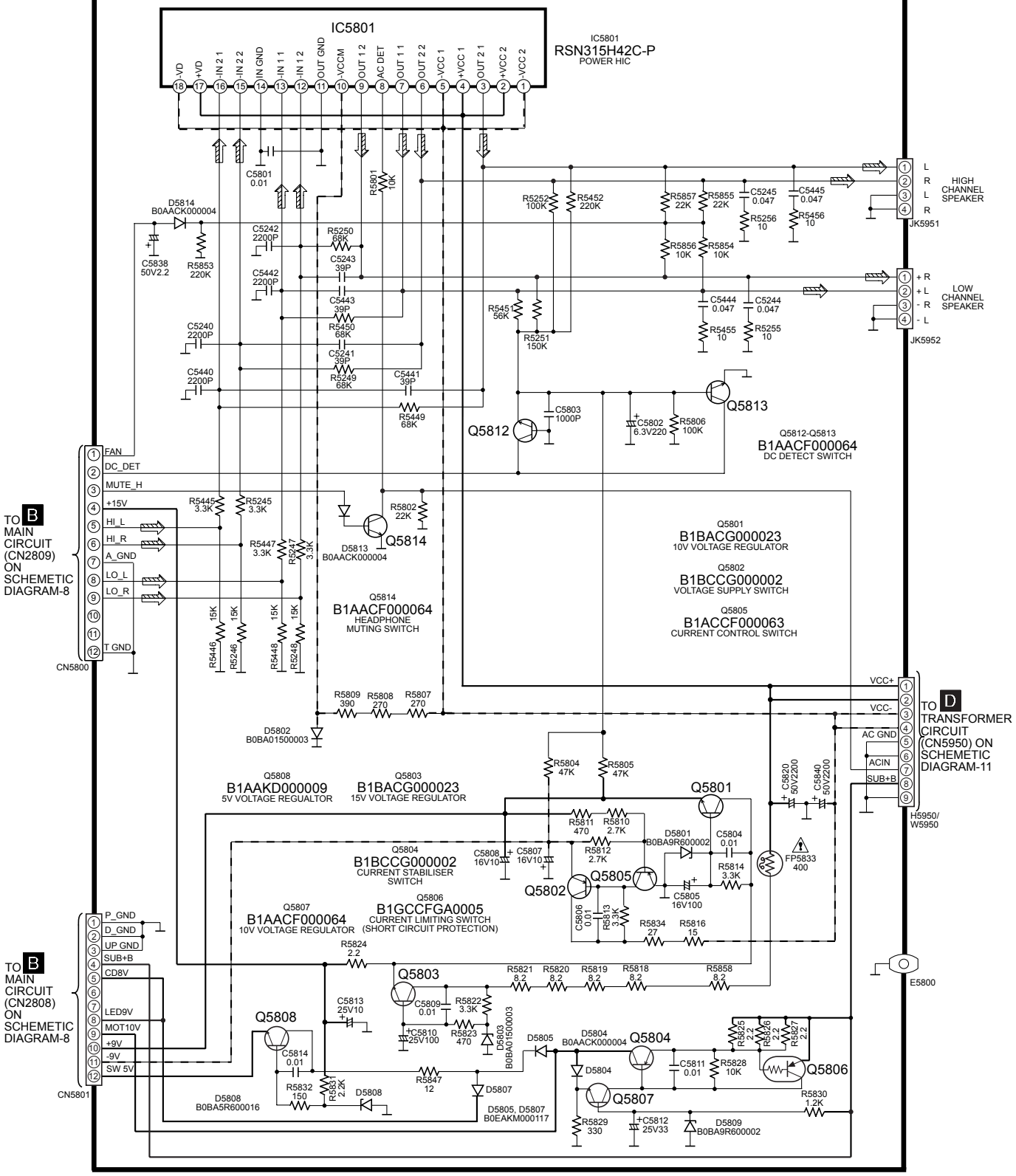


17.6. (H) Power Circuit

SCHEMATIC DIAGRAM - 12

—— : +B SIGNAL LINE – – : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

H POWER CIRCUIT



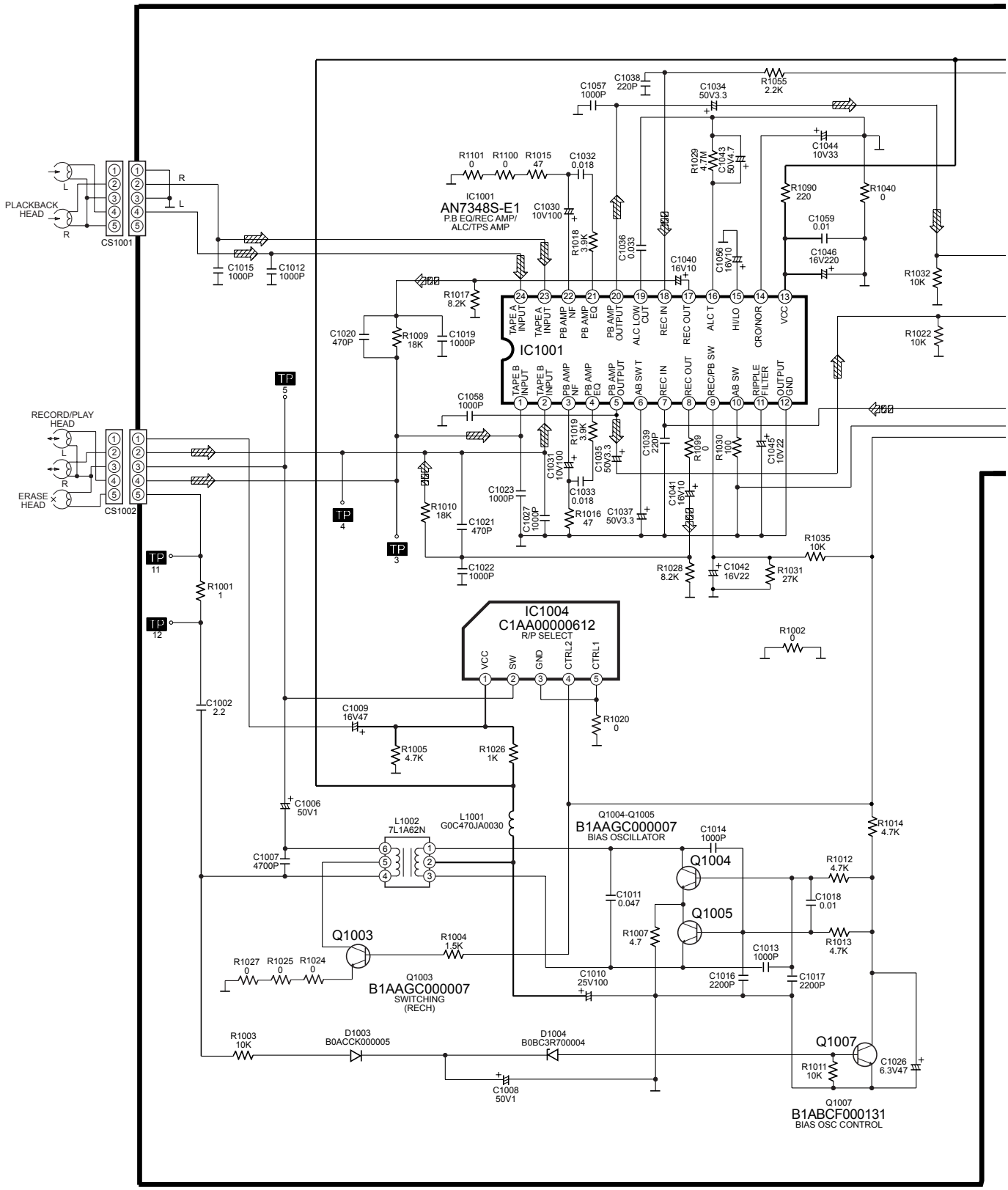
17.7. (I) Deck Circuit & (J) Mechanism Circuit

SCHEMATIC DIAGRAM -13

—— : +B SIGNAL LINE ▨ : PLAYBACK SIGNAL LINE

▨ : RECORD SIGNAL LINE

I DECK CIRCUIT

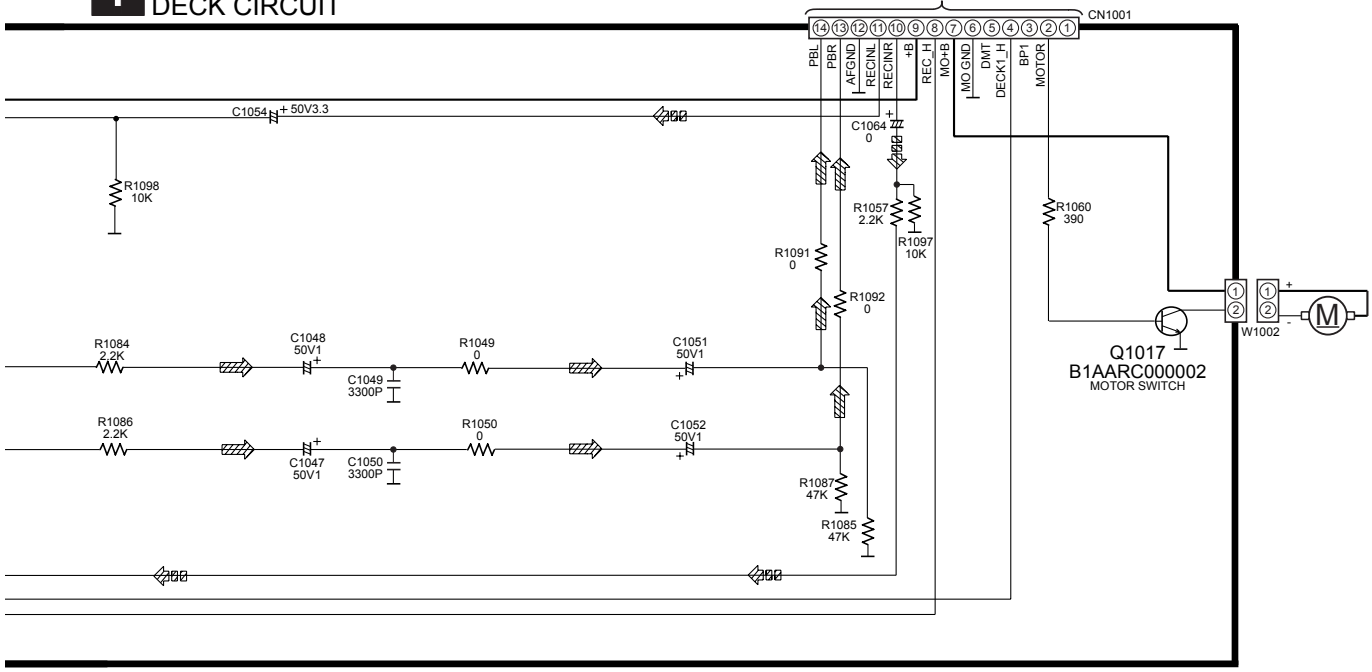


SCHEMATIC DIAGRAM - 14

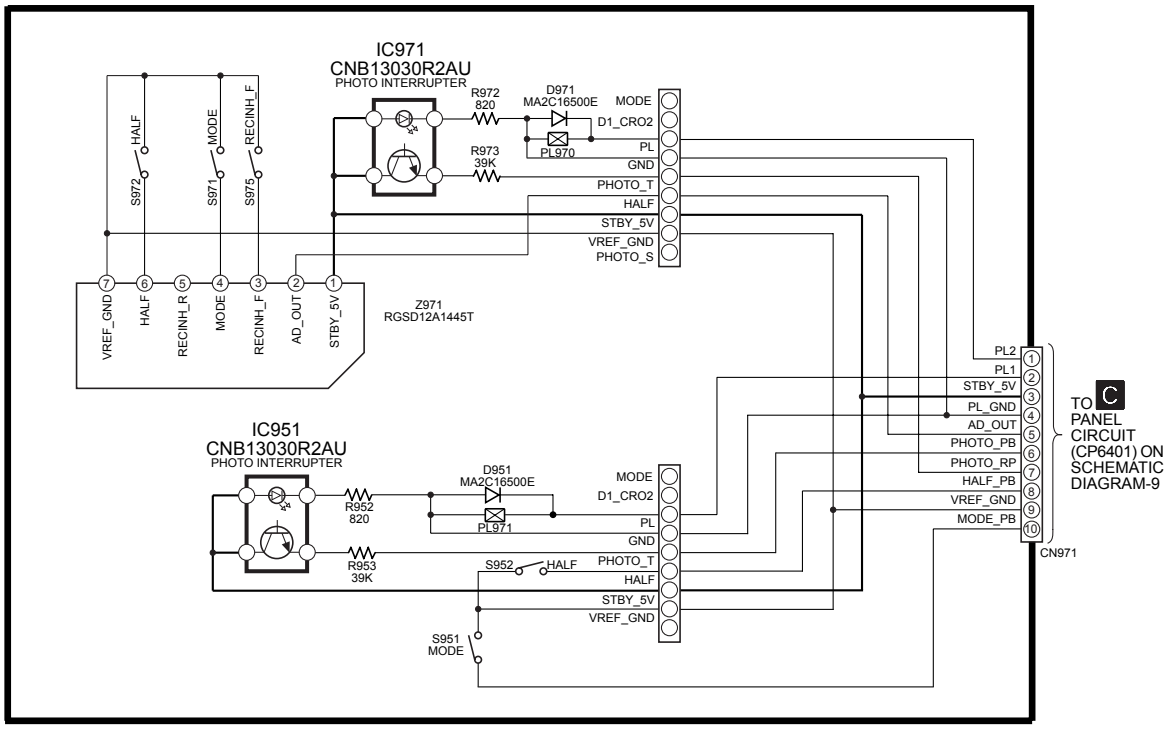
: +B SIGNAL LINE : PLAYBACK SIGNAL LINE

: RECORD SIGNAL LINE

I DECK CIRCUIT



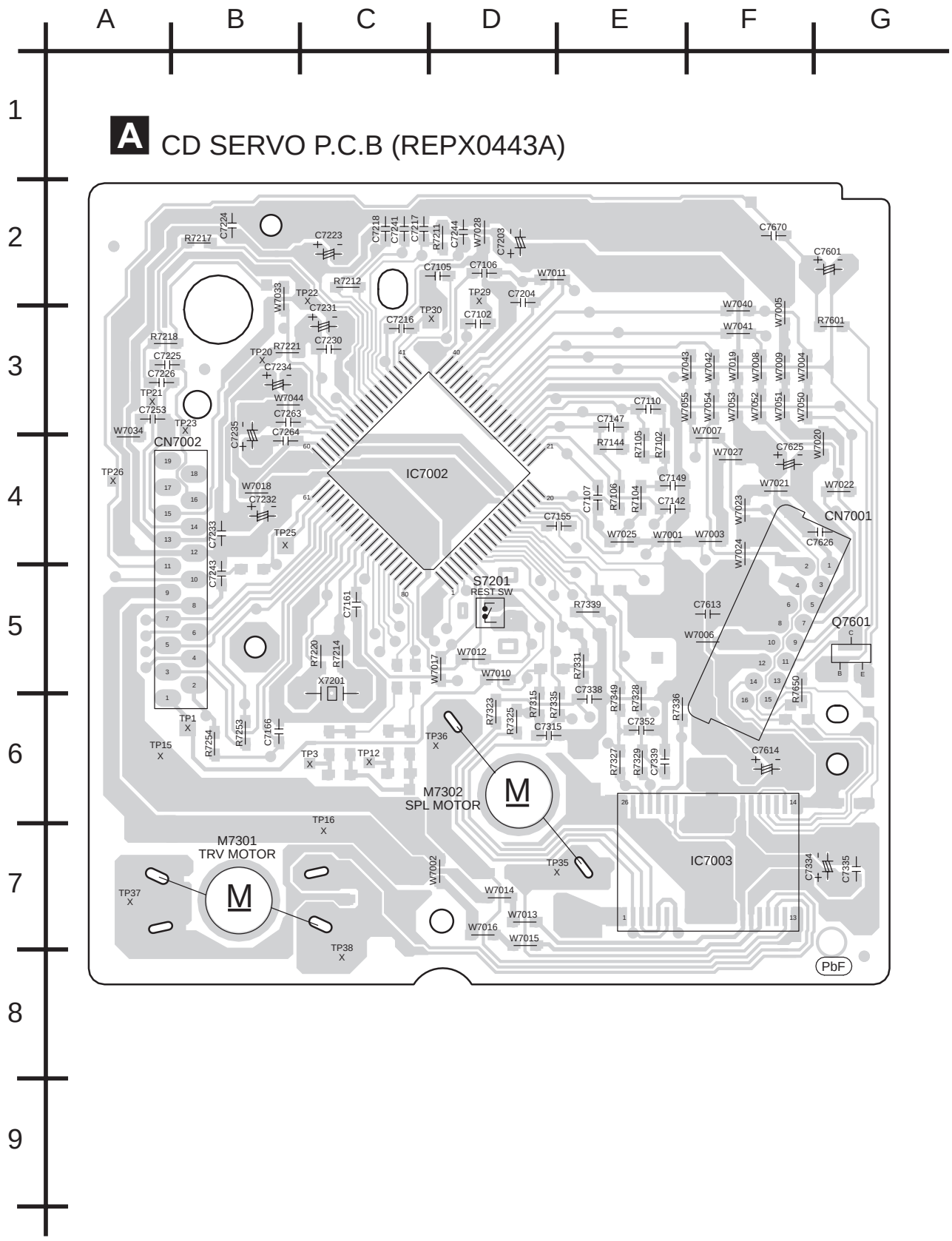
J DECK MECHANISM CIRCUIT



18 Printed Circuit Board

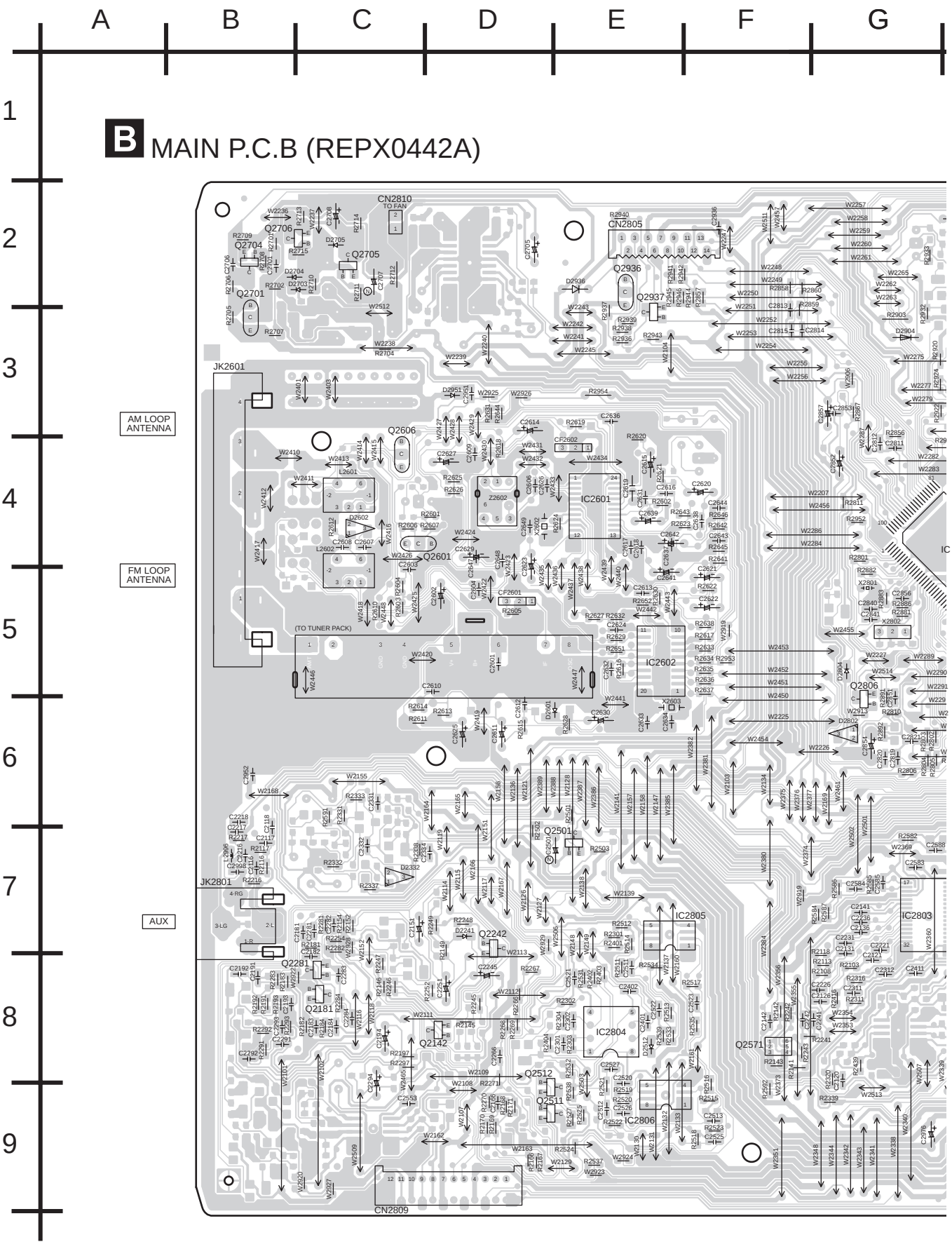
Note: Circuit board diagrams may ge modified at any time with the development of new technology.

18.1. (A) CD Servo P.C.B.

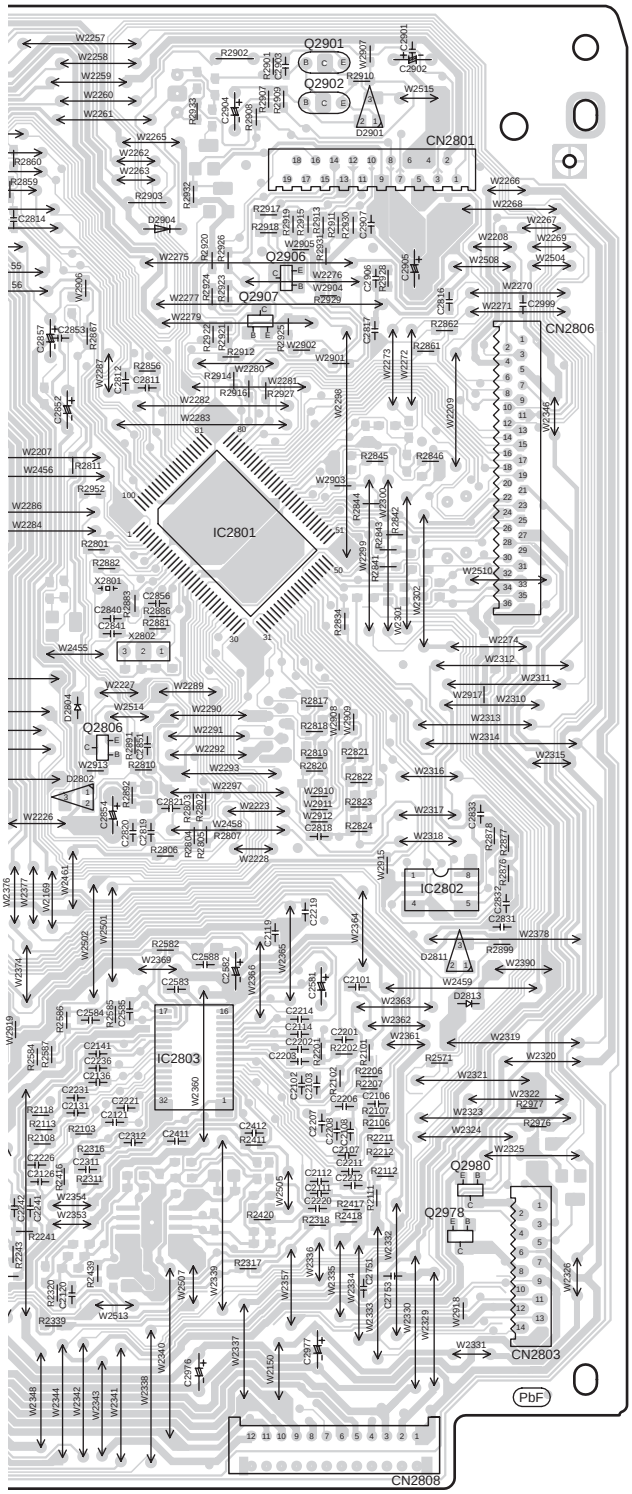


18.2. (B) Main P.C.B.

B MAIN P.C.B (REPX0442A)

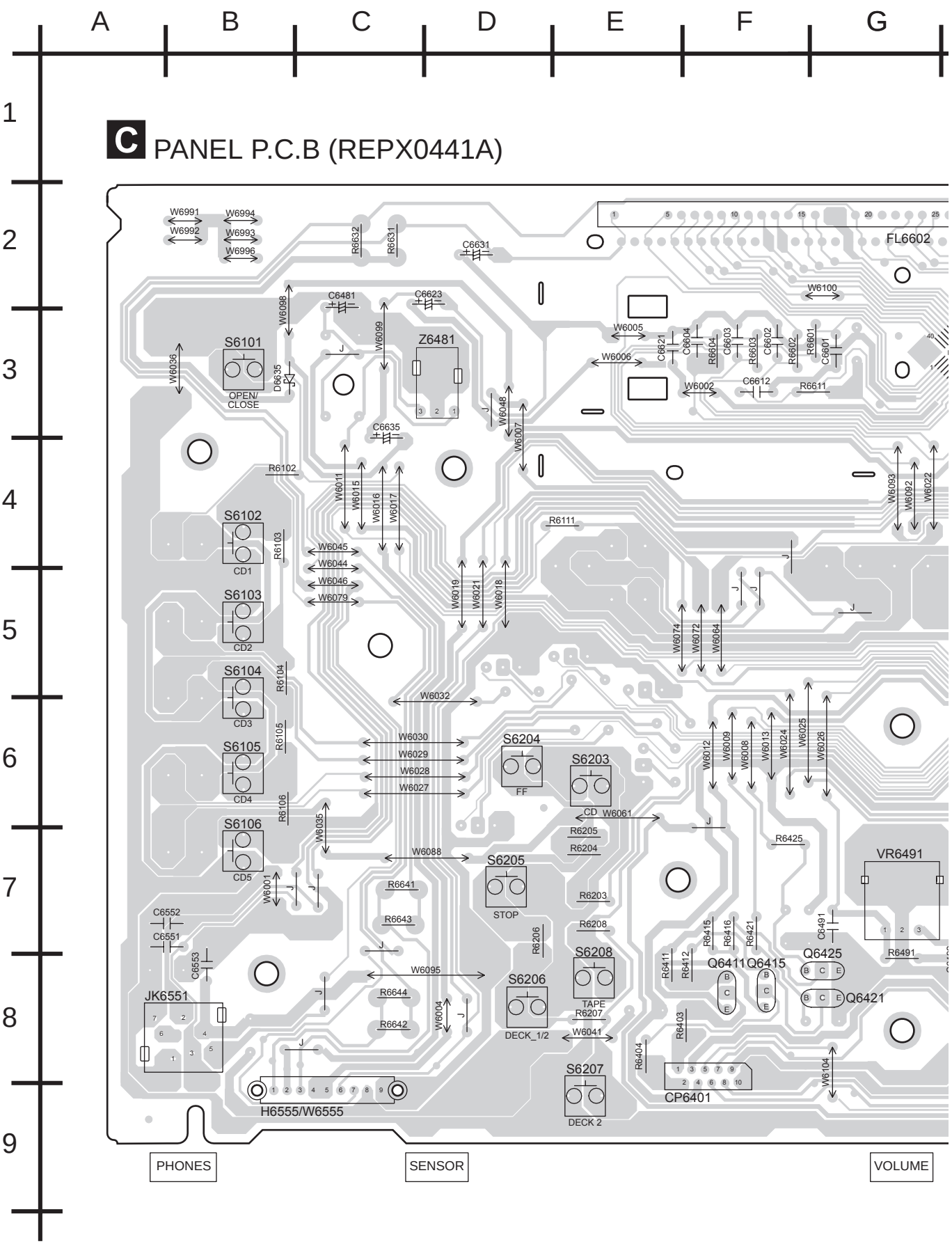


G H I J K L M

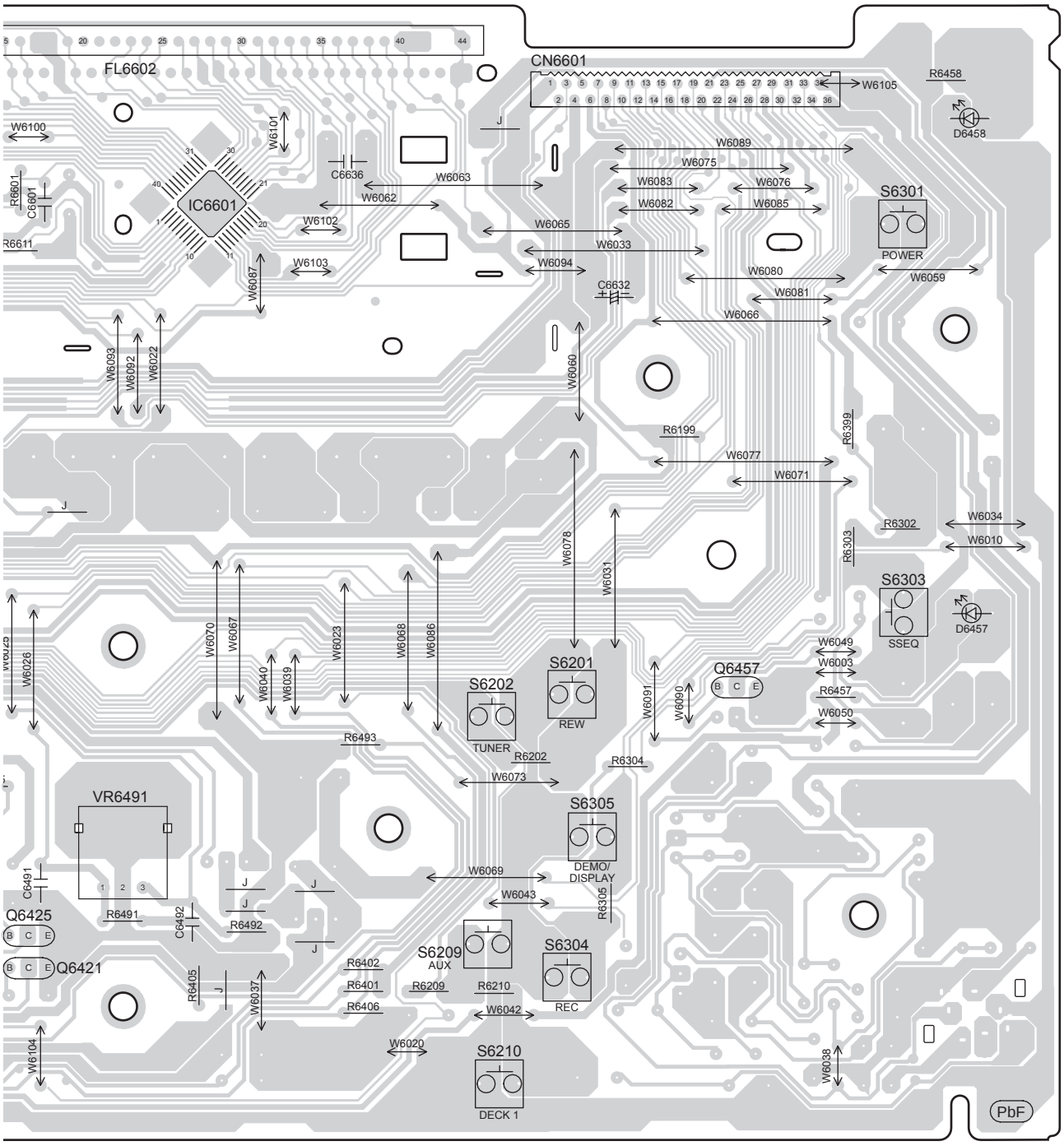

Q2901
Q2902
D2901
CN2801
Q2906
Q2907
CN2806
IC2801
Q2806
D2802
IC2802
IC2803
Q2980
Q2978
CN2803
CN2808
PbF

18.3. (C) Panel P.C.B.

C PANEL P.C.B (REPX0441A)

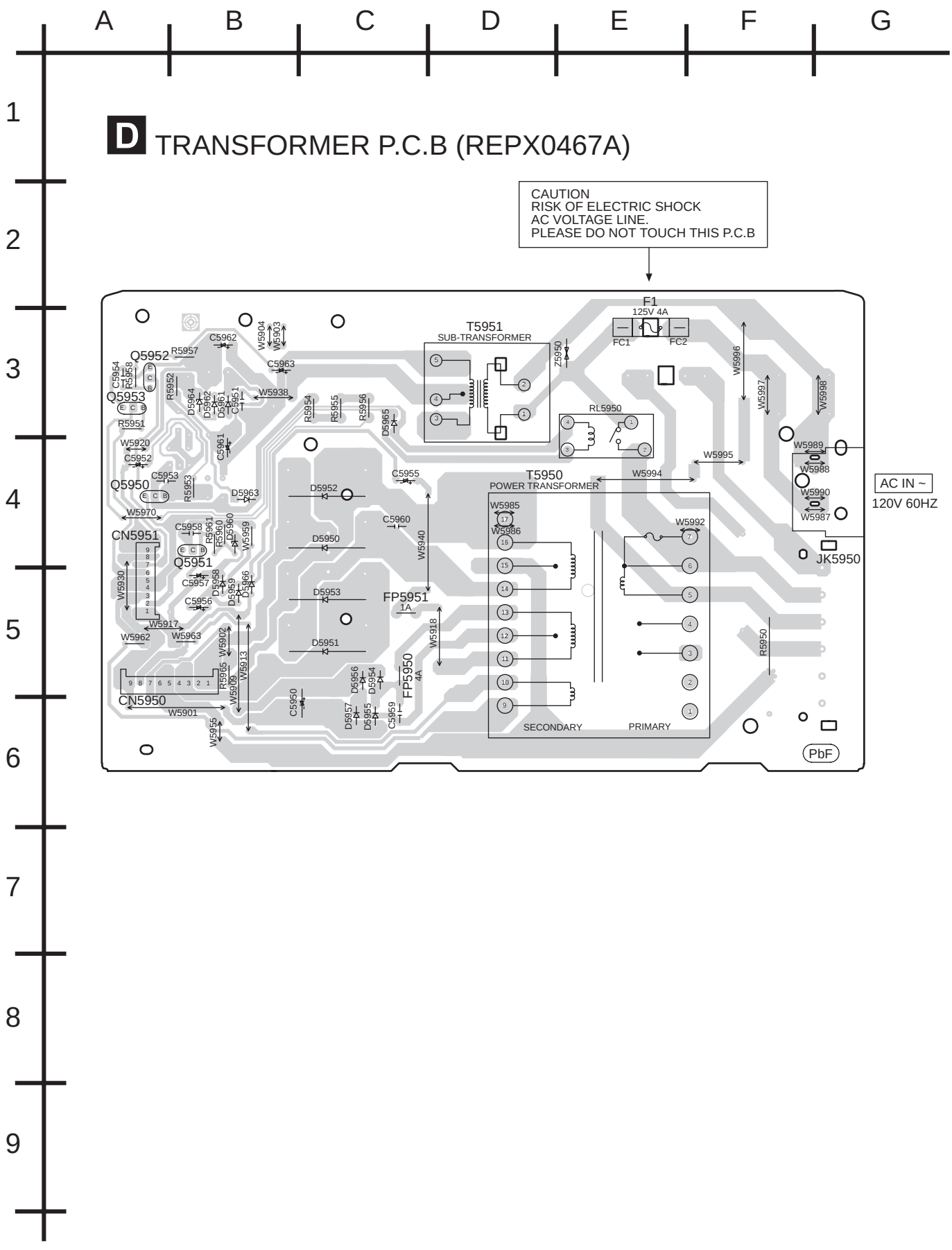


G H I J K L M


FL6602
CN6601
IC6601
W6100
W6101
W6102
W6103
W6105
W6062
W6063
W6065
W6033
W6094
W6089
W6075
W6083
W6076
W6082
W6085
W6080
W6081
W6066
W6059
W6060
W6087
W6093
W6092
W6022
C6636
C6632
R6601
C6601
R6611
R6458
D6458
S6301
POWER
R6199
R6399
W6077
W6071
R6302
W6034
W6010
R6303
S6303
SSEQ
D6457
W6078
W6031
W6070
W6067
W6023
W6068
W6086
W6040
W6039
W6026
S6201
REW
S6202
TUNER
Q6457
W6049
W6003
R6457
W6050
W6091
W6090
R6493
R6202
R6304
W6073
VR6491
S6305
DEMO/
DISPLAY
W6069
W6043
R6305
C6491
R6491
C6492
R6492
Q6425
Q6421
S6209
AUX
S6304
REC
R6402
R6401
R6406
R6209
R6210
W6042
W6020
R6405
W6037
W6104
S6210
DECK 1
W6038
PbF
VOLUME

18.4. (D) Transformer P.C.B.

D TRANSFORMER P.C.B (REPX0467A)

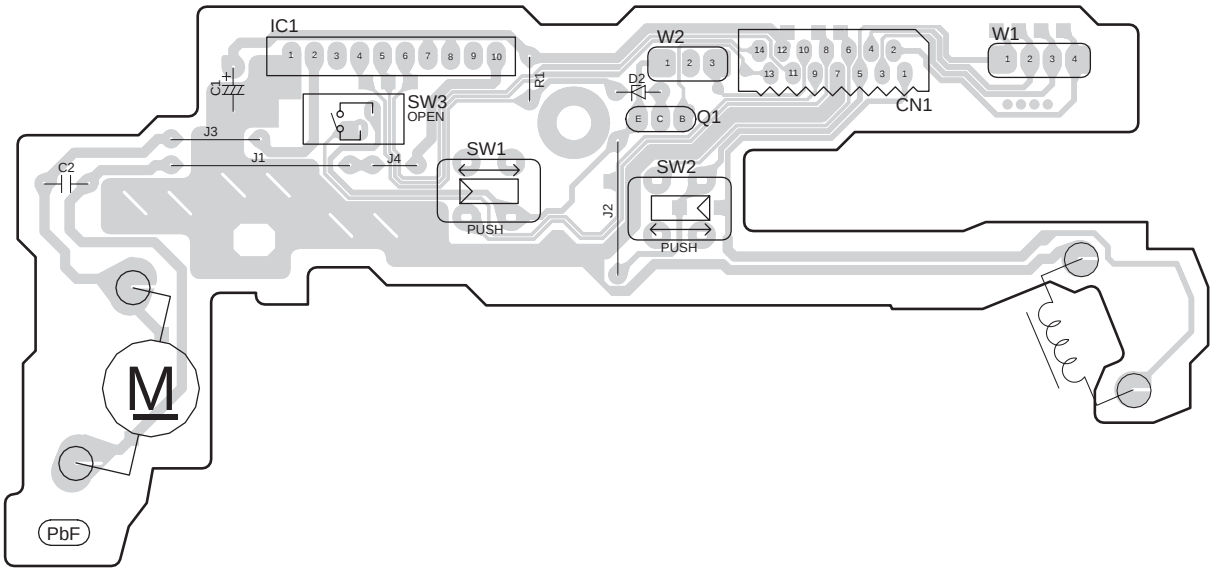


18.5. (E) CD Detect P.C.B., (F) Spindle Position P.C.B., (G) CD Loading P.C.B. & (K) Tuner Pack P.C.B.

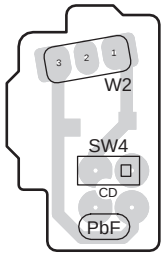
A B C D E F G

1 2 3 4 5 6 7 8 9

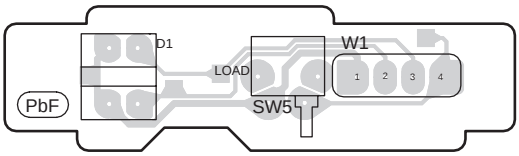
G CD LOADING P.C.B (REP2578A-N)



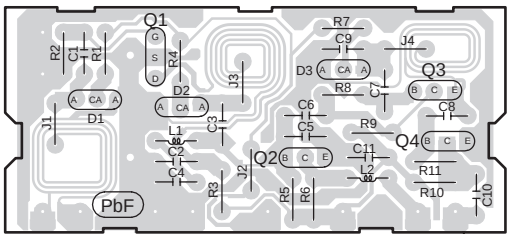
E CD DETECT P.C.B (REP2578A-N)



F SPINDLE POSITION P.C.B (REP2578A-N)

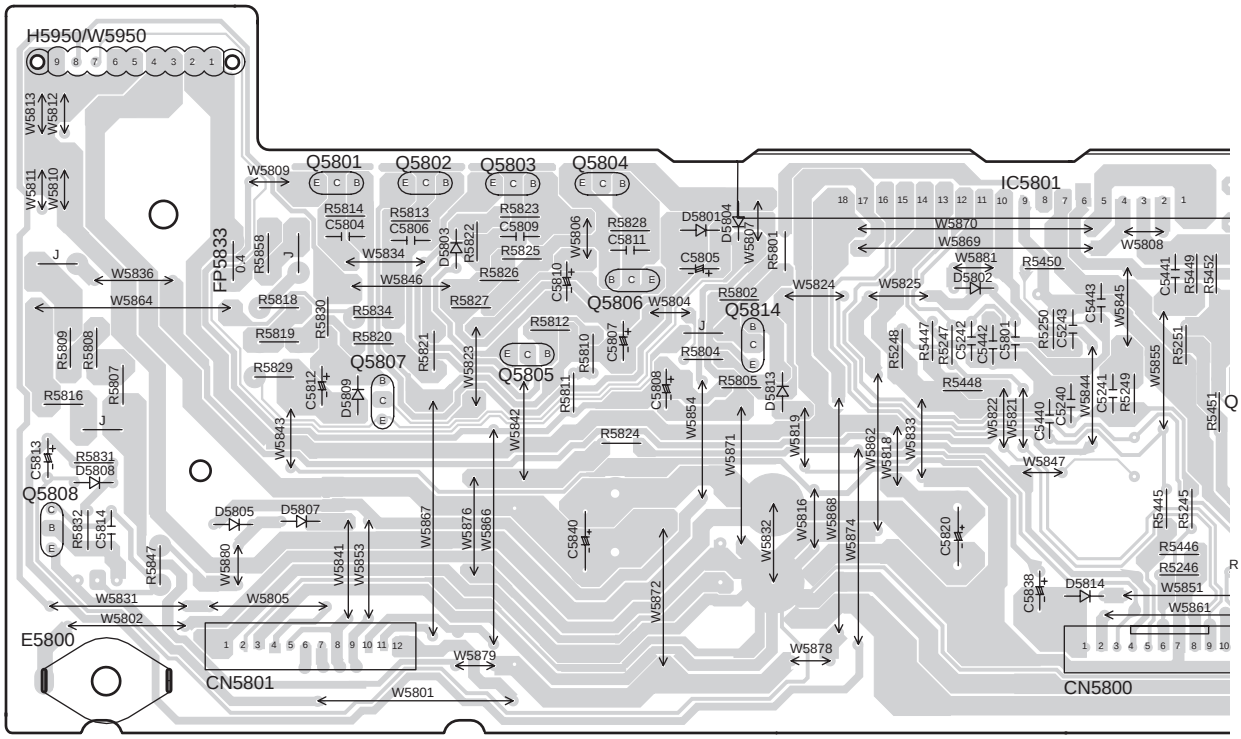


K TUNER PACK P.C.B (REP1999B)

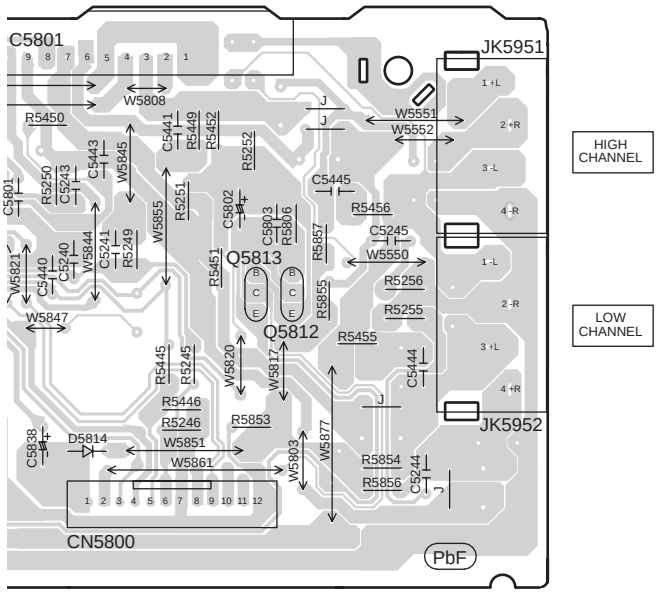


18.6. (H) Power P.C.B.

H POWER P.C.B (REPX0469A)



G H I J K L M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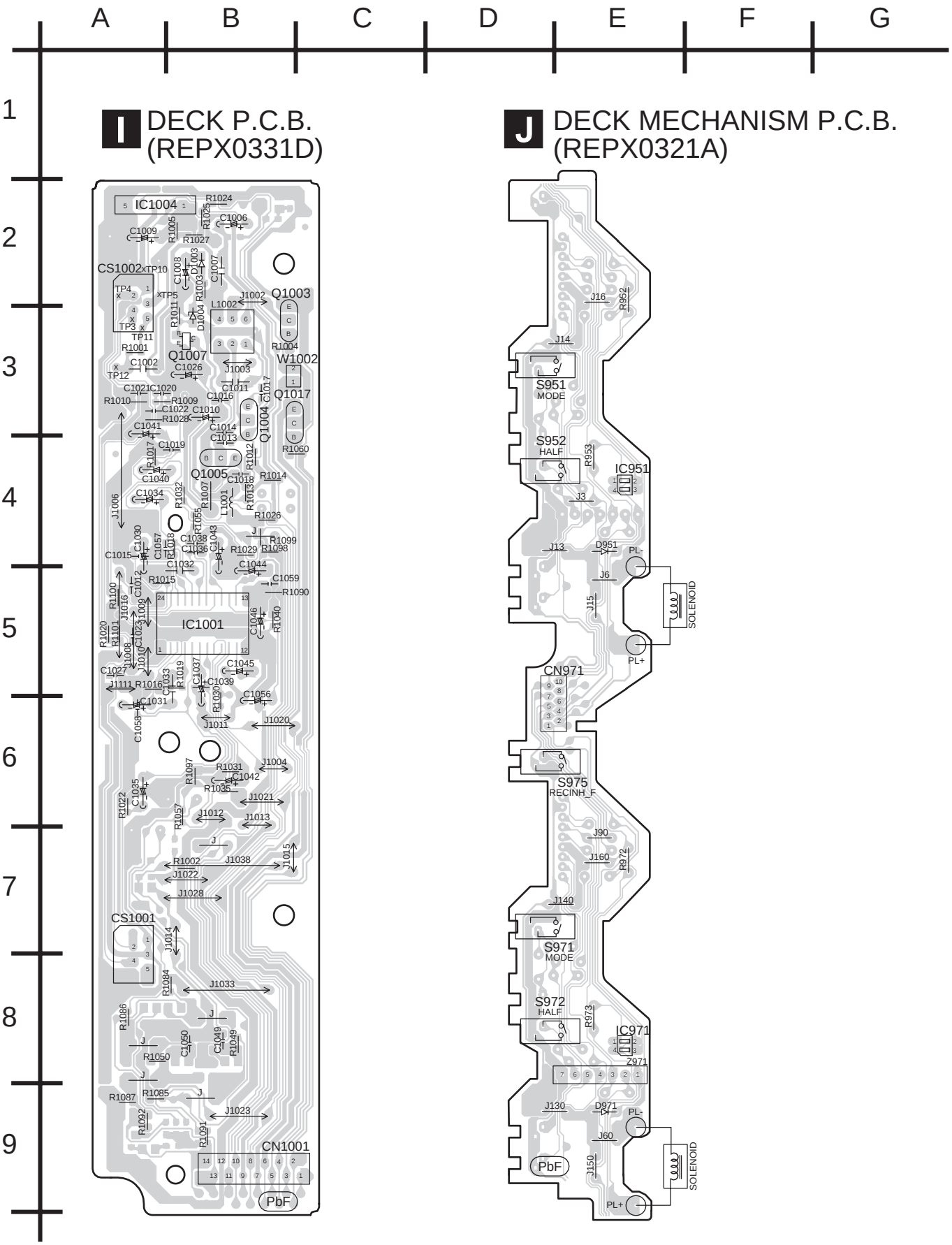
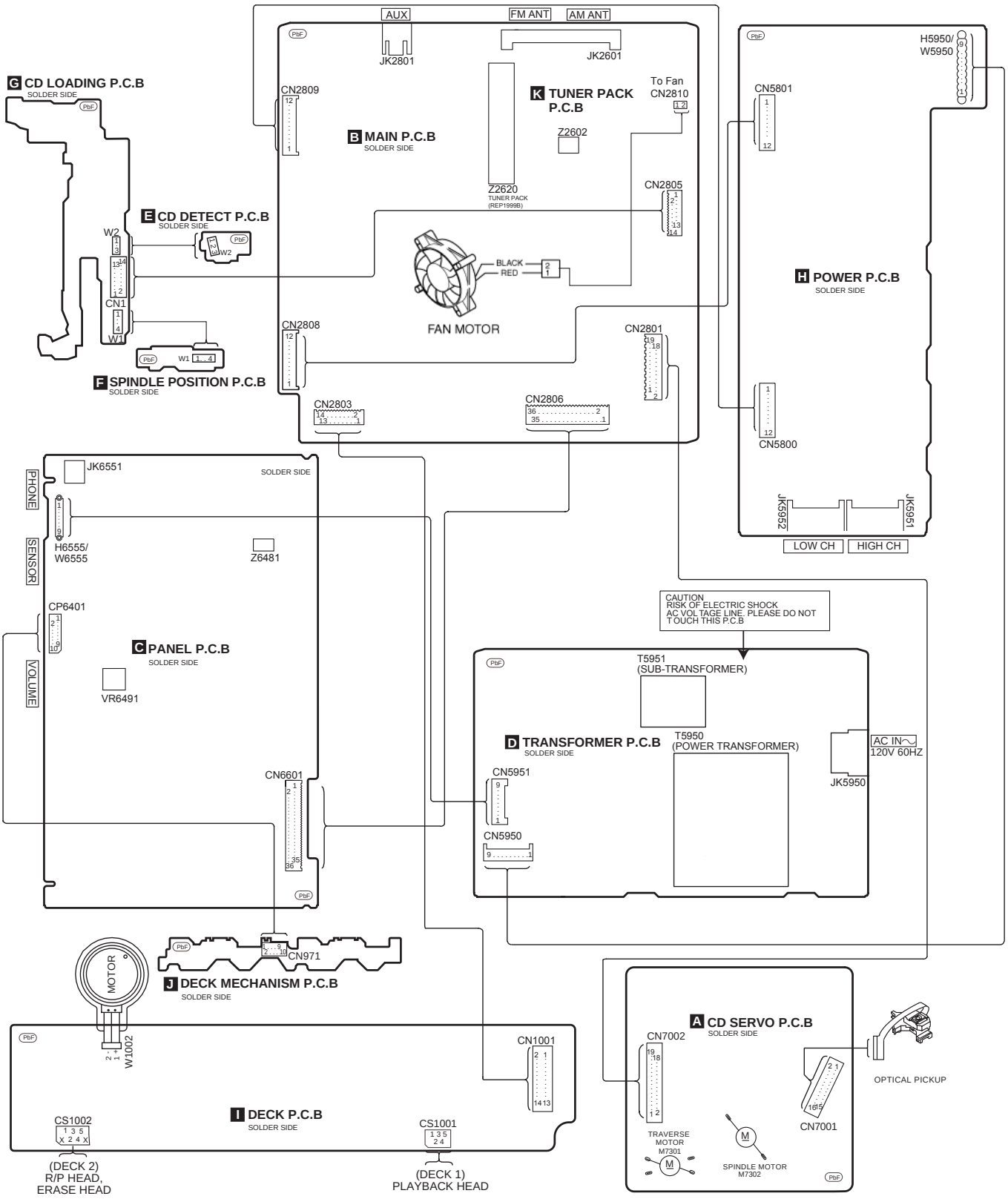
W5808
R5450
W5551
W5552
HIGH CHANNEL
LOW CHANNEL
Q5813
Q5812
JK5952
D5814
CN5800
PbF

18.7. (I) Deck P.C.B. & (J) Deck Mechanism P.C.B.



19 Wiring Connection Diagram



20 Illustration of IC's, Transistors and Diodes

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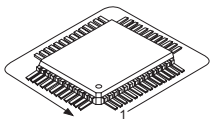
C0HBB0000044 (48P)
MN6627953HB (80P)



AN7348S-E1 (24P)
LA1833NMNTLM (24P)
LC72131MDTRM (20P)
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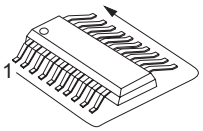

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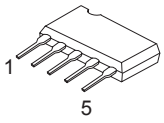

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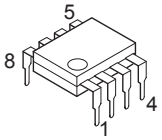

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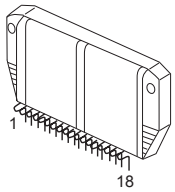

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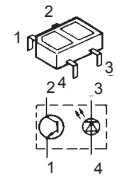

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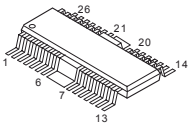

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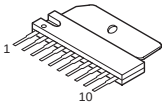

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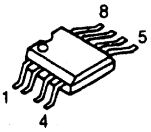

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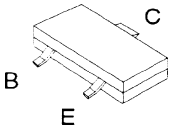

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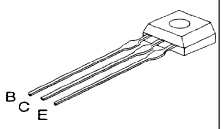

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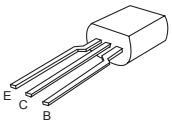

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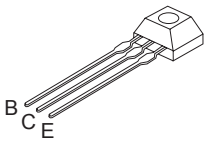

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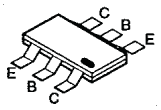

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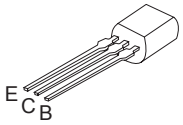

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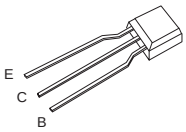

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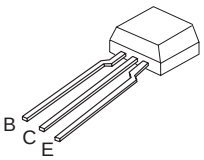

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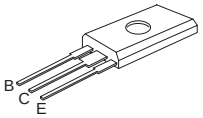

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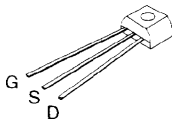

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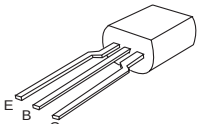

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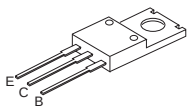

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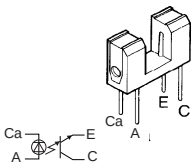

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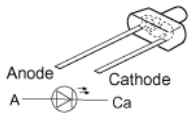

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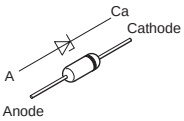

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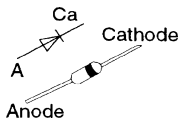

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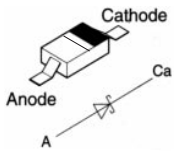

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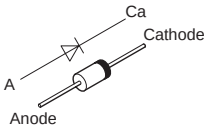

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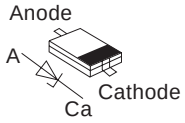

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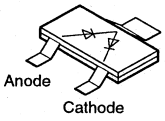

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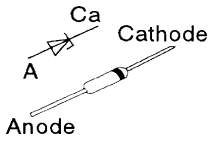

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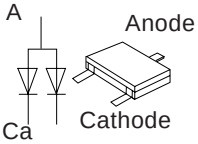

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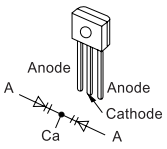


21 Terminal Function of IC's

21.1. IC7002 (MN6627953HB) Servo processor/ Digital signal processor/ Digital filter/ D/A converter

Pin No.	Mark	I/O	Function
1	EXT0	I/O	Extend input/output port 0
2	EXT1	I/O	Extend input/output port 1
3	EXT2	I/O	Extend input/output port 2
4	PWMSEL	I	PWM output selection input (L: Direct; H: Tri-State
5	SPOUT	O	Spindle driver output signal
6	SPPOL	O	Spindle driver output signal
7	TRVP	O	Spindle driver output signal
8	TRVM	O	Spindle driver output signal
9	TRVP2	O	Traverse driver output signal 2 (+)
10	TRVM2	O	Traverse driver output signal 2 (-)
11	TRP	O	Traverse driver output signal (+)
12	TRM	O	Traverse driver output signal (-)
13	FOP	O	Traverse driver output signal (+)
14	FOM	O	Traverse driver output signal (-)
15	IOVDD3	-	I/O power supply 3
16	DVDD1	-	Power supply 1 for digital circuit
17	DVSS1	-	Digital circuit GND 1
18	ADPVCC	I	Power voltage monitor. Power voltage input
19	TEIN	I	DSP traverse error signal input
20	FEIN	I	DSP focus error signal input
21	CEA	I/O	HPF-Amp capacitance connection terminal
22	RFENV	O	RF envelope signal monitor
23	FEOUT	O	FE Amp output
24	FEN	I	FE Amp reversal input
25	TEN	I	TE Amp reversal input
26	TEOUT	O	TE Amp output
27	VREF	O	VREF output
28	PD	I	APC Amp input
29	LD	O	APC Amp output
30	E	I	Tracking input signal 1
31	F	I	Tracking input signal 2
32	D	I	Tracking input signal 4
33	B	I	Tracking input signal 2
34	C	I	Tracking input signal 3
35	A	I	Focus input signal 1
36	DCDET	I	Detection HPF capacitance terminal
37	RFVDD	-	RF Amp power supply
38	RESERVE	-	AVSS2
39	RFOUT	O	RF Amp output
40	RFIN	I	AGC input
41	CAGC	I/O	AGC control terminal
42	ARFOUT	O	AGC output (Audio RF)
43	AVSS2	-	Analog circuit GND 2
44	ARFIN	I	RF signal input
45	DSLF	O	DSL loop filter
46	IREF	I	I (current), Reference input
47	PLLF	O	PLL loop filter
48	PLLF0	O	PLL loop filter
49	AVDD2	-	Analog circuit power supply 2
50	OUTL	O	LCH output signal
51	AVSS1	-	Audio output circuit GND 1
52	N.C.	-	No Connection
53	AVDD1	-	Power supply 1 for analog circuit
54	OUTR	O	RCH output signal
55	DVSS2	-	Digital circuit GND 2
56	IOVDD1	-	I/O power supply 1
57	DVDD2	-	Power supply 2 for Digital circuit
58	REGON	I	Laser diode control (H: ON)
59	IOMODE	I	I/O switching setting input
60	NTEST	I	Test mode setting input (H: ON)
61	TX	O	Digital audio interface output
62	FLAG	O	Flag signal output
63	MCLK	I	Micro-P serial command CLK
64	MDATA	I	Micro-P serial command DATA
65	MLD	I	Micro-P serial command LOAD
66	STAT	O	Status signal output
67	BLKCK	O	Subcode block clock
68	NRST	I	LSI reset input (L: RESET)
69	DVSS3	-	Digital circuit GND 3
70	X2	O	Crystal oscillator circuit output
71	X1	I	Crystal oscillator circuit input
72	IOVDD2	I	I/O power supply 2
73	DQSY	O	Pack signal output for CD-Text data
74	TXTD	O	CDText signal output
75	TXTCK	I	External clock signal input for CD-Text register
76	GIO0	I/O	General purpose input/output Terminal 0
77	GIO1	I/O	General purpose input/output Terminal 1
78	GIO2	I/O	General purpose input/output Terminal 2
79	GOUT0	O	General purpose output Terminal 0
80	GOUT1	O	General purpose output Terminal 1

21.2. IC7003 (AN8739SBTE2) Focus coil/ Tracking coil/ Traverse motor/ Spindle motor drive

Pin No.	Mark	I/O	Function
1	/RST	O	RESET output terminal
2	NC	-	N.C.
3	IN2	I	Motor drive (2) input
4	PC2	I	Turntable motor drive signal ("L" :ON)
5	NC	-	N.C.
6	IN1	I	Motor driver (1) input
7	PVCC1	-	Power supply (1) for driver
8	PGND1	-	Ground connection (1) for driver
9	NC	-	N.C.
10	D1-	O	Motor driver (1) reverse-action output
11	D1+	O	Motor driver (1) forward-action output
12	D2-	O	Motor driver (2) reverse-action output

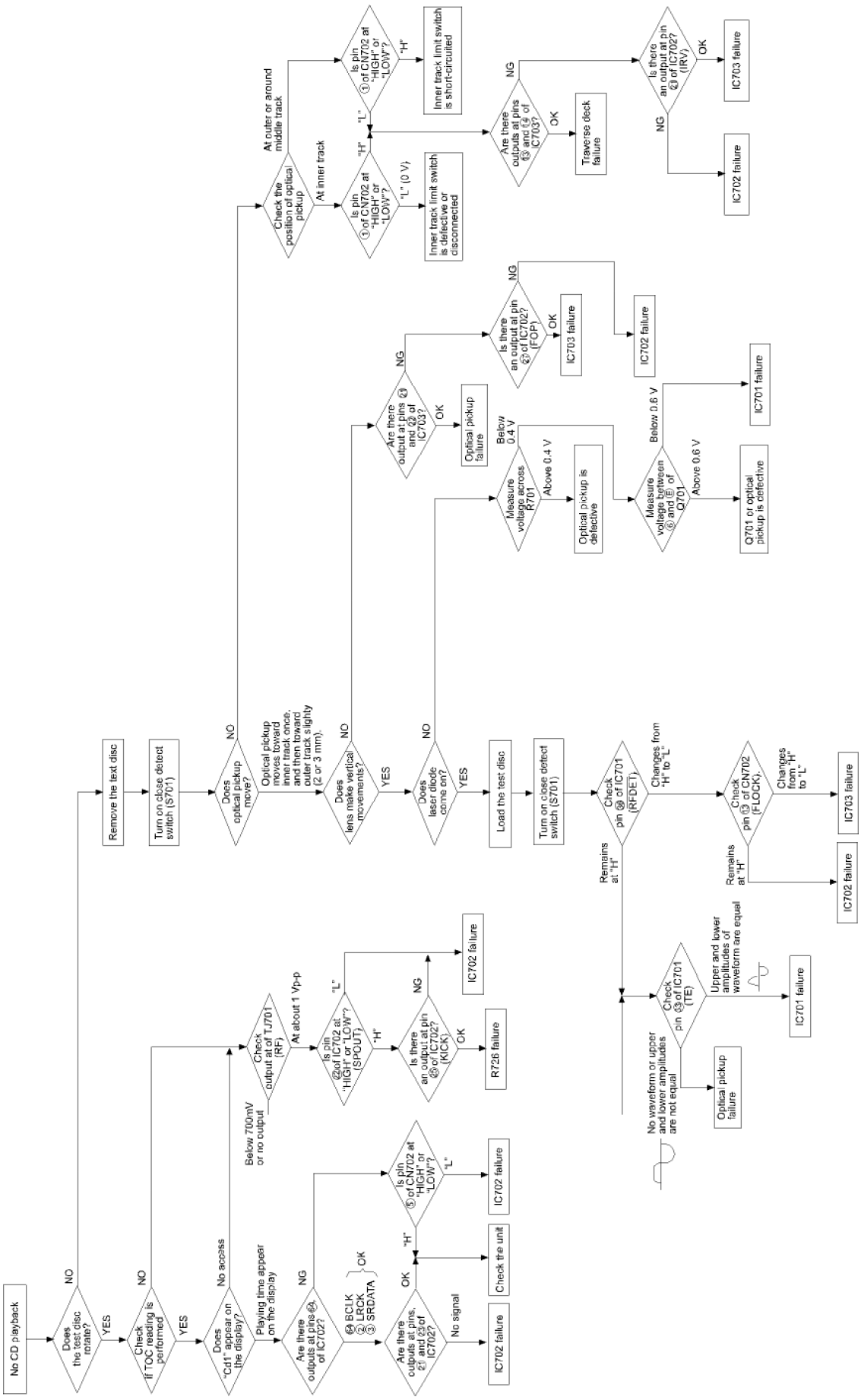
Pin No.	Mark	I/O	Function
13	D2+	O	Motor driver (2) forward-action output
14	D3-	O	Motor driver (3) reverse-action output
15	D3+	O	Crystal oscillating circuit input (f = 16.9344MHz)
16	D4-	O	Motor driver (4) reverse-action output
17	D4+	O	Motor driver (4) forward-action output
18	NC	-	N.C.
19	PGND2	-	Ground connection (2) for driver
20	PVCC2	-	Power supply (2) for driver
21	VCC	-	Power supply terminal
22	VREF	-	Reference voltage input
23	IN4	I	Motor driver (4) input
24	IN3	I	Motor driver (3) input
25	RSTIN	I	Reset terminal
26	NC	-	N.C.

21.3. IC2801 (CC2CBJG000564) System Microprocessor

Pin No.	Mark	I/O	Function
1	LM_1	I	Level Meter Left
2	N.C.	-	No Connection
3	PLL_CE	O	PLL Chip Select
4	RDS_DAT	I	RDS Data Input
5	RDS_CLK	I	RDS Clock Input
6	N.C.	-	No Connection
7	N.C.	-	No Connection
8	BYTE	I	External Data Bus Width Select Input
9	CNVss/EFP_ CNVss	-	Flash Mode Terminal (Connect to ground)
10	Xcin	-	32.768 kHz Sub Clock
11	Xcout	-	32.768 kHz Sub Clock
12	/RESET/EFP_ RESET	I	Reset Input (ACTIVE L)
13	Xout	-	10 MHz Main Clock
14	Vss	-	Ground (0V)
15	Xin	-	10 MHz Main Clock
16	Vcc	-	Power Supply (+5V)
17	/NMI	-	Connect to Vcc (+5V)
18	RMT	I	Remote Control Input
19	BLKCK	I	CD Block Clock Input (Inverted)
20	SYNC	I	AC Failure Detect Input
21	ST/DO	I	Tuner IF Data/ Stereo Input
22	SD	I	Tuner Signal Detect Input
23	Harmonic_ SW	I/O	*3 Harmonic Switch (Active L)
24	SW_LVL 1	O	*4 Sub-Woofer Level 1
25	SW_LVL 2	O	*4 Sub-Woofer Level 2
26	ASP_DAT	O	ASP Data
27	ASP_CLK	O	ASP Clock
28	N.C.	-	No Connection
29	PLL_DATA	O	PLL DATA
30	PLL_CLK	O	PLLCLK
31	REG 8/EFP_RxD1	I	Region Setting 8 (Subwoofer)
32	REG 7/ EFP_RxD1	I	Region Setting 7 (MIC)
33	REG 6/EFP_SCLK	I	Region Setting 6 (RDS)
34	REG 5/ EFP_BUSY	I	Region Setting 5 (Optical Out)
35	REG 4	I	Region Setting 4 (Deck Mechanism)
36	REG 3	I	Region Setting 3 (Tuner)
37	REG 2	I	Region Setting 2 (Tuner)
38	REG 1	I	Region Setting 1 (Tuner)
39	MUTE_H	O	HIC Mute
40	MUTE_A	O	Audio Mute
41	EE_CS/EFP_ /EPM	O	EEPROM Chip Select
42	EE_CLK	O	EEPROM Clock
43	EE_DAT	I/O	EEPROM Data
44	N.C.	-	No Connection
45	N.C.	-	No Connection
46	PCONT/ EFP_/CE	O	Main Transformer Control Output
47	DCDET	I	DC Detect Input
48-51	N.C.	-	No Connection
52	HALF_1	I	Deck 1 Half Playback Input
53	MODE_1	I	Deck 1 Mode Playback Input
54	SW_LED	O	*2 Sub Woofer LED
55	N.C.	-	No Connection
56	PLG1	O	Deck 1 plunger control
57	PLG2	O	Deck 2 plunger control
58	MTR	I/O	Deck motor control (“L” for motor ON)
59	REC	I/O	L when record circuit is operating
60	DECK1_H	O	H when DECK 1 P/B head is selected
61	N.C.	-	No Connection
62	Vcc	-	Power Supply (+5V)
63	N.C.	-	No Connection
64	Vss	-	Ground (0V)
65-66	N.C.	-	No Connection
67	V_JOG_A	I	Volume Jog A
68	V_JOG_B	I	Volume Jog B
69	EX1_CLK	I/O	*1 I/O Expander Clock
70	EX1_DAT	I	*1 I/O Expander Data
71	/FL_RESET	O	Reset Input (ACTIVE L)
72	FL_CS	I/O	FL Driver Chip Select
73	FL_DOUT	O	Serial Data To FL Driver (Output)
74	FL_CLK	I/O	Serial Clock To FL Driver
75	N.C.	-	No Connection
76	SSEQ_LED	O	Super Sound EQ LED
77	CD_RST	O	CD Reset Output
78	STATUS	I	CD Servo LSI Status Input
79	MLD	O	CD Command Load Output
80	MDATA_OUT	O	CD Command Data Output
81	MCLK	O	CD Command Clock Output
82	/RESTSW	I	CD Limit Switch Input for the Most Inner Point (Active Low)
83	CHG_HLF	O	Changer Half Drive Output
84	CHG_CW	O	Changer Motor Clockwise Output
85	CHG_CCW	O	Changer Motor Counterclockwise Output
86	CHG_SW1	I	CD Changer Switch 1 Input
87	CHG_SW2	I	CD Changer Switch 2 Input
88	CHG_PLR	O	Changer Plunger Output
89	CHG_AD2	I	Changer AD Detection Input (Position/Bottom)
90	CHG_AD1	I	Changer AD Detection Input (Open/Clamp)
91	DECK2	I	DECK CONDITION INPUT 2 (R_INHF/MODE2/HALF2)
92	KEY3	I	KEY3 INPUT
93	KEY2	I	KEY2 INPUT
94	KEY1	I	KEY1 INPUT
95	PHOTO_2	I	Rotation Detection Signal (Deck 2)
96	AVss	-	Analog Power Supply Input (Connect to GND)

Pin No.	Mark	I/O	Function
97	PHOTO_1	I	Rotation Detection Signal (Deck 1)
98	VREF	-	Reference for A-D (5V)
99	AVcc	-	Analog Power Supply Input
100	Demo Selector	I	(H= default demo on, L= default demo off.)

22 Troubleshooting Guide



23 Parts Location and Replacement Parts List

Notes:

- Important safety notice:

  Components identified by ⚠ mark have special characteristics important for safety.

  Furthermore, special parts which have purposes of fire-retardent (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.

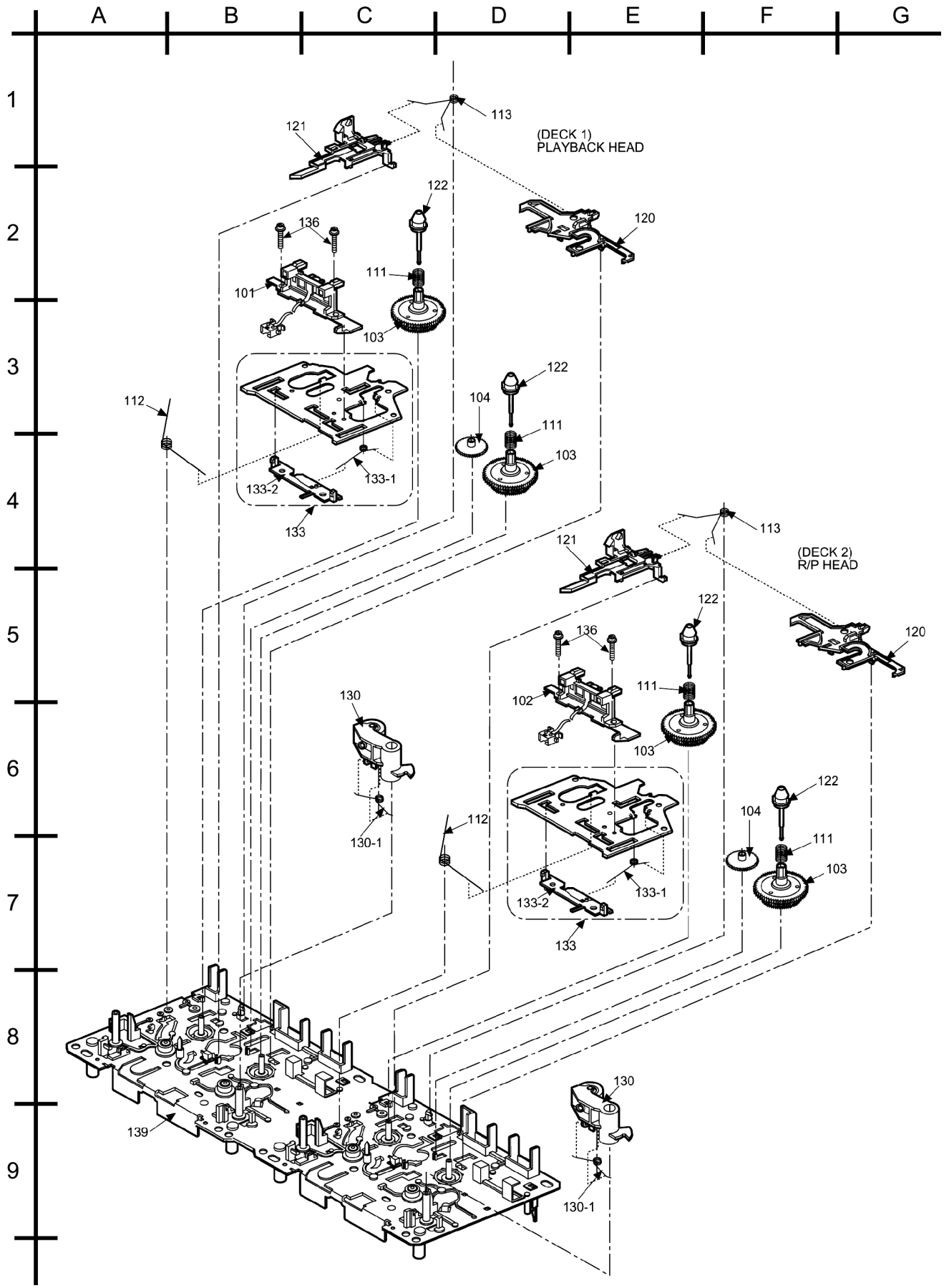
  When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.
- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)

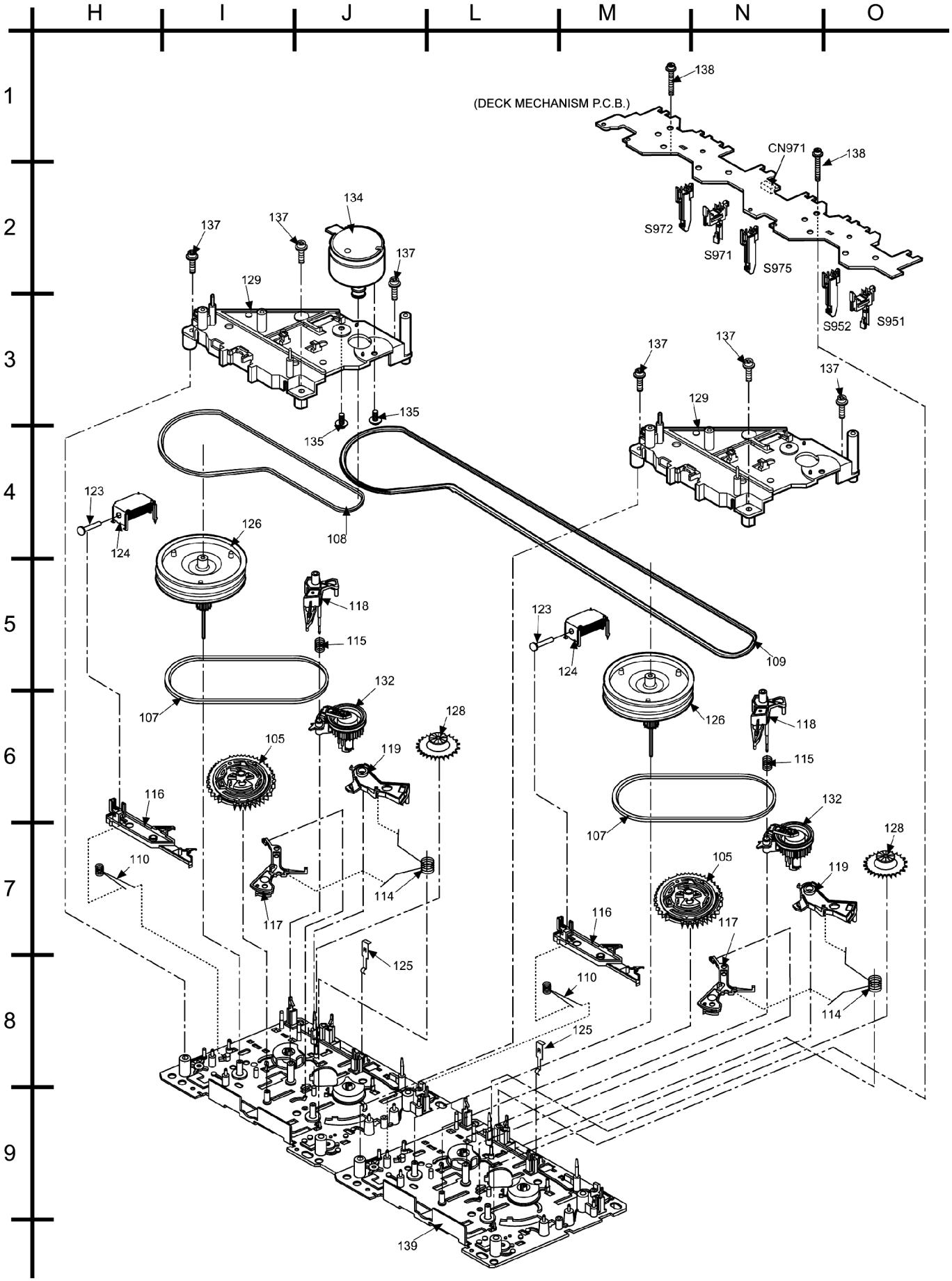
  Parts without these indications can be used for all areas.
- Warning: This product uses a laser diode. Refer to caution statements on "Precaution of Laser Diode".
- Capacitor values are in microfarads (μF) unless specified otherwise, P= Pico-farads (pF), F= Farads.
- Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM).
- The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
- [M] Indicates in the Remarks columns indicates parts supplied by **PAVCSG.**
- The "(SF)" mark denotes the standard part.
- Reference for O/I book languages are as follows:

Ar:	Arabic	Du:	Dutch	It:	Italian	Sp	Spanish
Cf:	Canadian French	En:	English	Ko:	Korean	Sw:	Swedish
Cz:	Czech	Fr:	French	Po:	Polish	Co:	Traditional Chinese
Da:	Danish	Ge:	German	Ru:	Russian	Cn:	Simplified Chinese
Pe:	Persian						

23.1. Deck Mechanism (RAA4502-S)

23.1.1. Deck Mechanism Parts Location

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(DECK MECHANISM P.C.B.)
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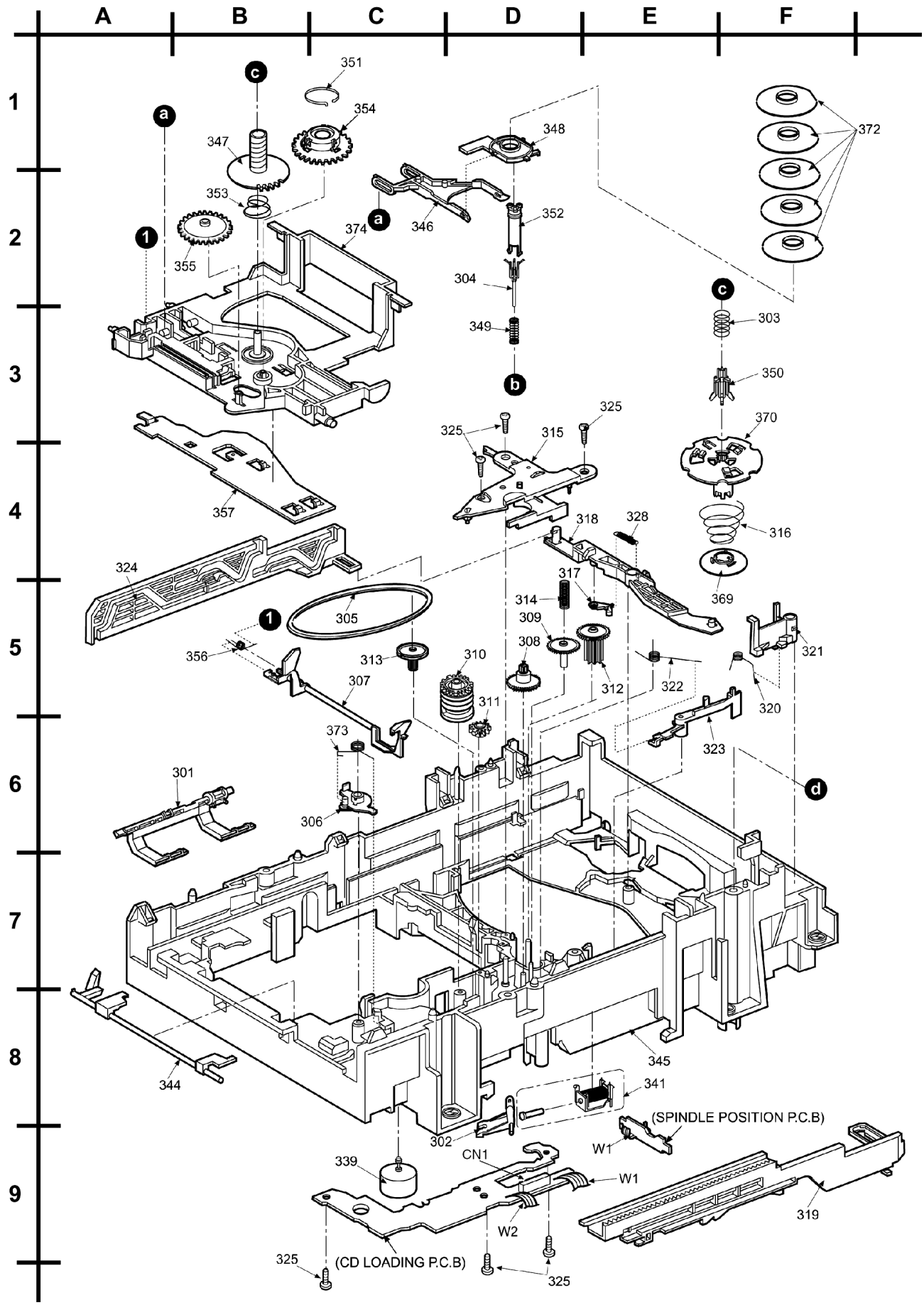
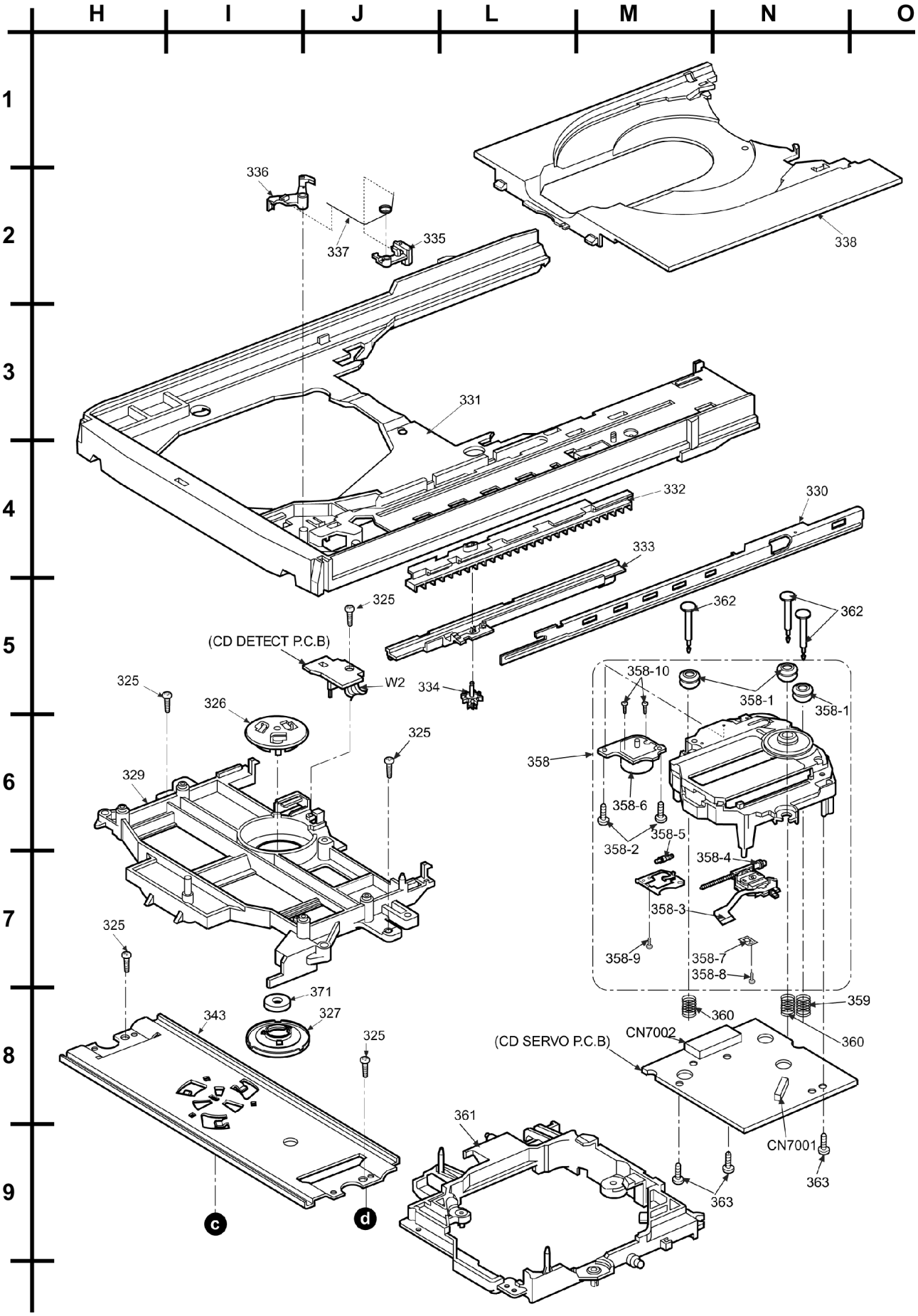
23.1.2. Deck Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CASSETTE DECK	
101	RED0069	R/P HEAD BLOCK UNIT	[M]
102	RED0070	P/B HEAD BLOCK UNIT	[M]
103	RDG0300	REEL BASE GEAR	[M]
104	RDG0301	WINDING RELAY GEAR	[M]
105	RDK0026	MAIN GEAR	[M]
107	RDV0033-4	WINDING BELT	[M]
108	RDV0064	CAPSTAN BELT A	[M]
109	RDV0071	CAPSTAN BELT B	[M]
110	RMB0312	TRIGGER LEVER SPRING	[M]
111	RMB0400	REEL SPRING	[M]
112	RMB0403	HEAD PANEL SPRING	[M]
113	RMB0404	BRAKE ROD SPRING	[M]
114	RMB0406	FR LEVER SPRING	[M]
115	RMB0408	THRUST SPRING	[M]
116	RML0370	TRIGGER LEVER	[M]
117	RML0371	FR LEVER	[M]
118	RML0372	WINDING LEVER	[M]
119	RML0374	EJECT LEVER	[M]
120	RMM0131	BRAKE ROD	[M]
121	RMM0133	EJECT ROD	[M]
122	RMQ0519	REEL HUB	[M]
123	RMS0398-1	MOVING CORE	[M]
124	RSJ0003	PLUNGER ASS'Y	[M]
125	RMC0061	PACK SPRING	[M]
126	RXF0061	FLYWHEEL F ASS'Y	[M]
128	RXG0040	FF RELAY GEAR ASS'Y	[M]
129	RMK0283A-J	SUB-CHASSIS	[M]
130	RXL0124	PINCH ROLLER F ASS'Y	[M]
130-1	RMB0401	PINCH ARM SPRING F	[M]
132	RXL0126	WINDING ARM ASS'Y	[M]
133	RXQ0412	HEAD PANEL ASS'Y	[M]
133-1	RMB0405	FR ROD SPRING	[M]
133-2	RMM0132	FR ROD	[M]
134	REM0121	CAP MOTOR ASS'Y	[M]
135	RHD26022	MOTOR SCREW	[M]
136	XTW2+5L	HEAD BLOCK UNIT SCREW	[M]
137	XTW26+10S	SUB-CHASSIS SCREW	[M]
138	XYC2+JF17	PCB EARTH SCREW	[M]
139	RFKJAA4501-S	CHASSIS ASS'Y	[M]

23.2. CD Loading Mechanism (RD-DAC026-S)

23.2.1. CD Loading Mechanism Parts Location

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(CD DETECT P.C.B)
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(CD SERVO P.C.B)
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CN7001
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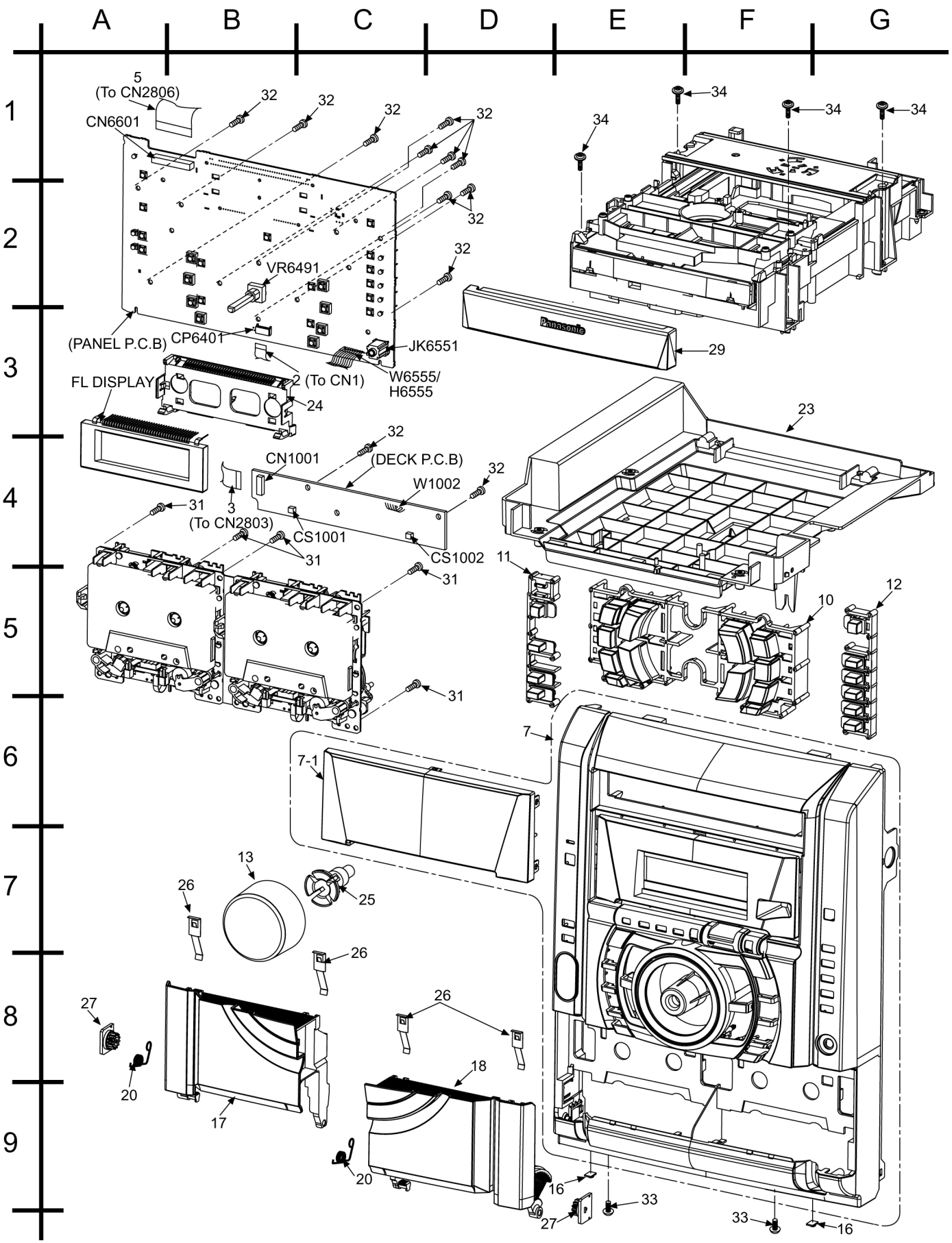
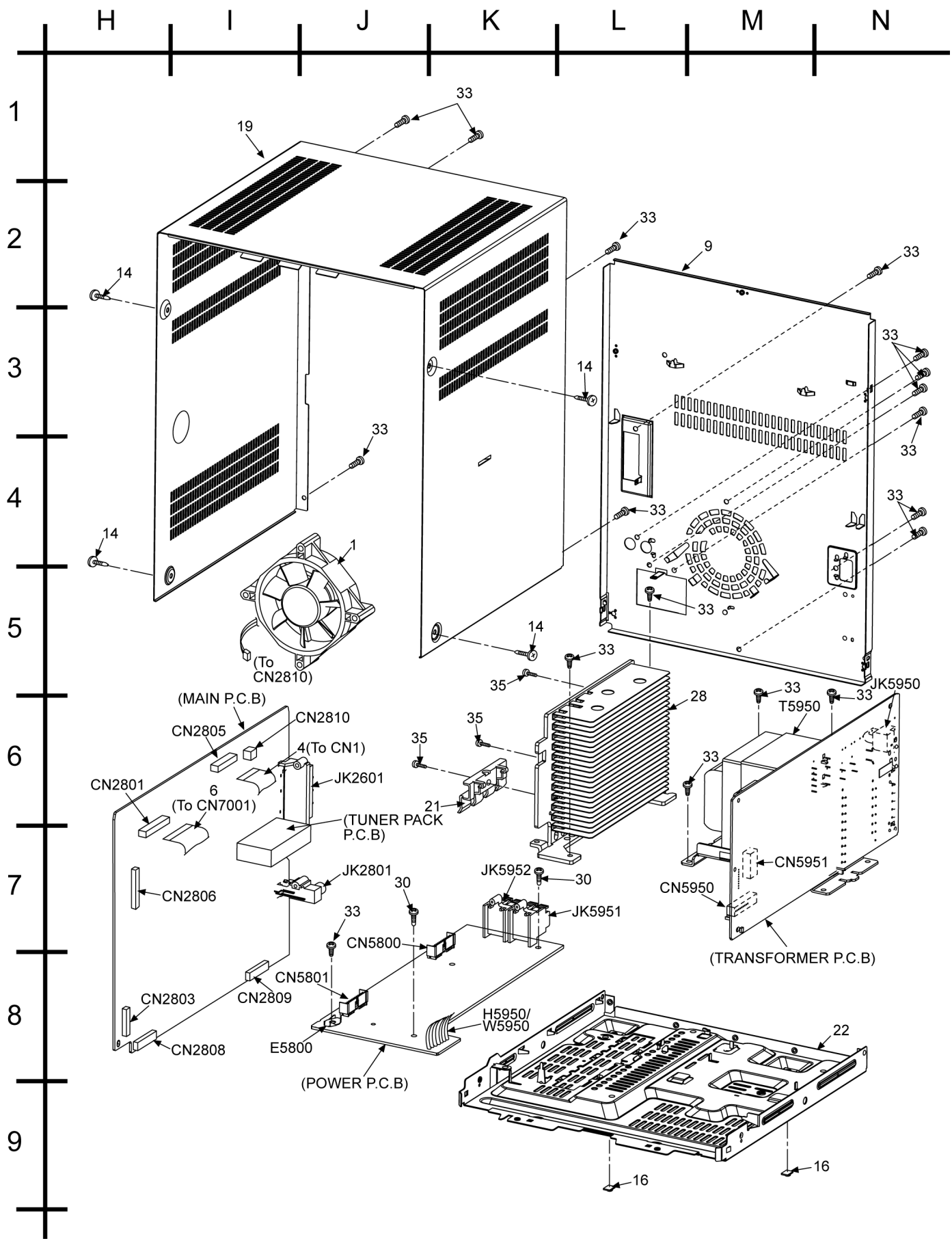
23.2.2. CD Loading Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		TRAVERSE DECK	
301	RML0517	TIMING LEVER	[M]
302	RML0516	PLUNGER LEVER	[M]
303	RMB0551	UPPER SPINDLE SPRING	[M]
304	RMQ0744	LOWER HOOK	[M]
305	RDV0056	BELT	[M]
306	RML0525	FRONT LOCK LEVER	[M]
307	RML0526	DISC LEVER	[M]
308	RDG0424	DRIVE GEAR	[M]
309	RDG0425	CHANGE GEAR	[M]
310	RDG0427	TRAVERSE CAM GEAR	[M]
311	RDG0428	TRAVERSE RELAY GEAR	[M]
312	RDG0426	UP/DOWN GEAR	[M]
313	RDG0429	PULLEY GEAR	[M]
314	RMB0549-1	CHANGE GEAR SPRING	[M]
315	RMQ0748	PITCH PLATE	[M]
316	RMB0553	PUSH SPRING	[M]
317	RML0530	ASSIST LEVER	[M]
318	RML0518	CONNECTION LEVER	[M]
319	RMM0201	SLIDE PLATE 1	[M]
320	RME0258	REAR LOCK SPRING	[M]
321	RML0521	REAR LOCK	[M]
322	RME0257	TRAY LOCK LEVER SPRING	[M]
323	RML0520	TRAY LOCK	[M]
324	RMM0202	SLIDE PLATE 2	[M]
325	XTB3+10J	SCREW	[M]
326	RMR0334	FIXED PLATE	[M]
327	RMR0624-W2	CLAMPER	[M]
328	RMB0561	ASSIST LEVER SPRING	[M]
329	RMR1121-K	MECHA COVER	[M]
330	RMA1110-2	TRAY ANGLE	[M]
331	RMR1122-H1	TRAY BASE	[M]
332	RMM0204	CARRIER	[M]
333	RMM0203	DRIVE RACK	[M]
334	RDG0432	SPEED UP GEAR	[M]
335	RML0524	SLIDE LOCK	[M]
336	RML0523	CARRIER LOCK	[M]
337	RME0260-1	SLIDE LOCK SPRING	[M]
338	RMR1123-H	TRAY	[M]
339	RXQ0595	MOTOR SUB ASS'Y	[M]
341	RSJ0003	SOLENOID ASS'Y	[M]
343	RMA1106	UPPER PLATE	[M]
344	RML0519	CD LEVER	[M]
345	RFKNAAK27GCS	MECHA BASE ASS'Y	[M]
346	RML0522	TURNING STOPPER	[M]
347	RMQ0745	LOWER SPINDLE	[M]
348	RMQ0746	UP/DOWN BASE	[M]
349	RMB0550	LOWER SPINDLE SPRING	[M]
350	RMQ0747	UPPER HOOK	[M]
351	RME0263	CLICK SPRING	[M]
352	RMQ0743	SPINDLE SHAFT	[M]
353	RMB0552	CUSHION SPRING	[M]
354	RDG0430	RELAY GEAR 'A'	[M]
355	RDG0431	RELAY GEAR 'B'	[M]
356	RME0262	DISK LEVER SPRING	[M]
357	RMA1105	SUPPORT PLATE	[M]
358	RAE0153Z-3S	TRAVERSE	[M]
358-1	SHGD113-1	FLOATING CUSHION	[M]
358-2	SNSD38	TRV MOTOR ASSY SCREW	[M]
358-3	RAF0152A-S	OPU UNIT	[M]
358-4	RDG0247	DRIVE GEAR	[M]
358-5	RDG0248	RELAY GEAR	[M]
358-6	RXQ0339	TRAVERSE MOTOR ASS'Y	[M]
358-7	RXQ0304-1	NUT PLATE ASS'Y	[M]
358-8	XQN17+CG5	NUT PLATE ASSY SCREW	[M]
358-9	XQS2+A3FZ	SPINDLE MOTOR SCREW	[M]
358-10	XQS17+A35FZ	TRAVERSE MOTOR SCREW	[M]
359	RME0142	FLOATING SPRING A	[M]
360	RME0109	FLOATING SPRING B	[M]
361	RMR1124A-X	CD TRAVERSE CHASSIS	[M]
362	RMS0632	TRAVERSE PIN	[M]
363	XTN2+6G	SCREW	[M]
369	RMX0141	PUSH SPACER	[M]
370	RMQ0749	UPPER SPINDLE	[M]
371	RHM0001	MAGNET	[M]
372	RMX0140	DISC SPACER	[M]
373	RME0261	FRONT LOCK SPRING	[M]
374	RMQ0742	SPINDLE BASE	[M]

23.3. Cabinet

23.3.1. Cabinet Parts Location

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T5950
(MAIN P.C.B)
CN2810
CN2805
4(To CN1)
JK2601
CN2801
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(To CN7001)
(TUNER PACK P.C.B)
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JK2801
JK5952
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JK5951
CN2806
CN5800
CN5801
CN2809
CN2803
CN2808
E5800
H5950/ W5950
(POWER P.C.B)
CN5951
CN5950
(TRANSFORMER P.C.B)
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23.3.2. Cabinet Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	L6FALEFH0030	FAN	[M]
2	REEX0202	10P FFC (PANEL)	[M]
3	REEX0211	14P FFC WIRE (DECK)	[M]
4	REEX0212	14P FFC WIRE	[M]
5	REEX0401	30P FFC (PANEL)	[M]
6	REEX0447	16P FFC WIRE	[M]
7	RFKGAAK330PK	FRONT PANEL ASS'Y	[M]P-K
7	RFKGAAK330PC	FRONT PANEL ASS'Y	[M]PC-K
7	RFKGAAK330PS	FRONT PANEL ASS'Y	[M]P-S
7-1	RKWX0239-H	FL WINDOW	[M]
9	RGRX0042A-A	REAR PANEL	[M]P-K, P-S
9	RGRX0042A-B	REAR PANEL	[M]PC-K
10	RGUX0593-S	FUNCTION BUTTON	[M]
11	RGUX0594-K	POWER/SSEQ BUTTON	[M]PC-K,P-K
11	RGUX0594-S	POWER/SSEQ BUTTON	[M]P-S
12	RGUX0595-K	CD EJECT BTN/CONTROL	[M]PC-K,P-K
12	RGUX0595-S	CD EJECT BTN/CONTROL	[M]P-S
13	RGWX0072-S	VOLUME KNOB	[M]
14	RHD30004-2S	SCREW	[M]P-S
14	RHD30004-K	SIDE SCREW	[M]PC-K,P-K
16	RKA0072-KJ	LEG CUSHION	[M]
17	RKFX0125-K	CASS LID L	[M]PC-K,P-K
17	RKFX0125-S	CASS LID L	[M]P-S
18	RKFX0126-K	CASS LID R	[M]PC-K,P-K
18	RKFX0126-S	CASS LID R	[M]P-S
19	RKMX0105-K	TOP CABINET	[M]PC-K,P-K
19	RKMX0105-S	TOP CABINET	[M]P-S
20	RMBX0036	CASS OPEN SPRING	[M]
21	RMCX0021	TRANSISTOR CLIP	[M]
22	RMKX0099	BOTTOM CHASSIS	[M]
23	RMKX0100	CD CHASSIS	[M]
24	RMNX0138	FL HOLDER	[M]
25	RMQX0128	VOL KNOB ADAPTOR	[M]
26	RUS757ZAA	CASS HALF SPRING	[M]
27	RXGX0002	DAMPER GEAR	[M]
28	RXXX0057	HEAT SINK UNIT	[M]
29	RYFX0138-K	CD LID UNIT	[M]
30	XTB3+10J	SCREW	[M]
31	XTB3+10JFZ	SCREW	[M]
32	XTBS26+10J	SCREW	[M]
33	XTBS3+8JFZ1	SCREW	[M]
34	XTW3+12T	SCREW	[M]
35	XTW3+15T	SCREW	[M]

23.4. Electrical Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PRINTED CIRCUIT BOARD	
	REPX0443A	CD SERVO P.C.B.	[M](RTL)
	REPX0442A	MAIN P.C.B.	[M](RTL)
	REPX0441A	PANEL P.C.B.	[M](RTL)
	REPX0467A	TRANSFORMER P.C.B.	[M](RTL)
	REP2578A-N	CD LOADING P.C.B.	[M](RTL)
	REP2578A-N	CD DETECT P.C.B.	[M](RTL)
	REP2578A-N	SPINDLE POSITION P.C.B.	[M](RTL)
	REP1999B	TUNER PACK P.C.B.	[M](RTL)
	REPX0469A	POWER P.C.B.	[M](RTL)
	REPX0331D	DECK P.C.B.	[M](RTL)
	REPX0321A	DECK MECHANISM P.C.B.	[M](RTL)
		INTEGRATED CIRCUITS	
IC1	C0GAM0000005	IC MOTOR DRIVE	[M]
IC951	CNB13030R2AU	IC PHOTO INTERRUPTER	[M]
IC971	CNB13030R2AU	IC PHOTO INTERRUPTER	[M]
IC1001	AN7348S-E1	IC P.B. EQ/REC AMP/ALC/TPS AMP	[M]
IC1004	C1AA00000612	IC R/P SELECT	[M]
IC2601	LA1833NMNTLM	IC FM/AM IF AMP DET/AM OSC MIX/FM MPX	[M]
IC2602	LC72131MDTRM	IC PLL FREQUENCY SYNTHESIZER	[M]
IC2801	C2CBJG000564	IC MICROPROCESSOR	[M]
IC2803	C1BB00000732	IC AUDIO SOUND PROCESSOR	[M]
IC2804	C0AABA000009	IC DUAL OP-AMP	[M]
IC2805	C0ABBB000244	IC DUAL OP-AMP	[M]
IC2806	C0ABBB000244	IC DUAL OP-AMP	[M]
IC5801	RSN315H42C-P	IC POWER HIC	[M]
IC6601	C0HBB0000044	IC FL DRIVER	[M]
IC7002	MN6627953HB	IC SERVO PROCESSOR DIGITAL SIGNAL PROCESSOR/DIGITAL FILTER/D/A CONVERTER	[M]
IC7003	AN8739SBTE2	IC FOCUS COIL/TRACKING COIL/TRAVERSE MOTOR/SPINDLE MOTOR DRIVE	[M]
		TRANSISTORS	
Q1	2SK544F-AC	TRANSISTOR	[M]
Q2	B1AAAC000011	TRANSISTOR	[M]
Q3	B1AAAD000013	TRANSISTOR	[M]
Q4	B1AAAD000013	TRANSISTOR	[M]
Q1003	B1AAGC000007	TRANSISTOR	[M]
Q1004	B1AAGC000007	TRANSISTOR	[M]
Q1005	B1AAGC000007	TRANSISTOR	[M]
Q1007	B1ABCF000131	TRANSISTOR	[M]
Q1017	B1AARC000002	TRANSISTOR	[M]
Q2142	B1ABCF000131	TRANSISTOR	[M]
Q2181	B1ABCF000131	TRANSISTOR	[M]
Q2242	B1ABCF000131	TRANSISTOR	[M]
Q2281	B1ABCF000131	TRANSISTOR	[M]
Q2501	B1GDCFJJ0023	TRANSISTOR	[M]
Q2511	B1GDCFJJ0023	TRANSISTOR	[M]
Q2512	B1ABCF000131	TRANSISTOR	[M]
Q2571	B1GFGCAA0001	TRANSISTOR	[M]
Q2601	B1AABC000003	TRANSISTOR	[M]
Q2606	B1GCCFJJ0015	TRANSISTOR	[M]
Q2701	2SD0592ARA	TRANSISTOR	[M]
Q2704	2SB0709AHL	TRANSISTOR	[M]
Q2705	2SB0709AHL	TRANSISTOR	[M]
Q2706	2SD0601AHL	TRANSISTOR	[M]
Q2806	B1GBCFJJ0039	TRANSISTOR	[M]
Q2901	B1ACKD000004	TRANSISTOR	[M]
Q2902	B1AACF000064	TRANSISTOR	[M]
Q2906	B1ABCF000131	TRANSISTOR	[M]
Q2907	B1ABCF000131	TRANSISTOR	[M]
Q2936	B1ACKD000004	TRANSISTOR	[M]
Q2937	B1GBCFJJ0039	TRANSISTOR	[M]
Q2978	B1GDCFJJ0023	TRANSISTOR	[M]
Q2980	B1GDCFJJ0023	TRANSISTOR	[M]
Q5801	B1BACG000023	TRANSISTOR	[M]
Q5802	B1BCCG000002	TRANSISTOR	[M]
Q5803	B1BACG000023	TRANSISTOR	[M]
Q5804	B1BCCG000002	TRANSISTOR	[M]
Q5805	B1ACCF000063	TRANSISTOR	[M]
Q5806	B1GCCFGA0005	TRANSISTOR	[M]
Q5807	B1AACF000064	TRANSISTOR	[M]
Q5808	B1AAKD000009	TRANSISTOR	[M]
Q5812	B1AACF000064	TRANSISTOR	[M]
Q5813	B1AACF000064	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q5814	B1AACF000064	TRANSISTOR	[M]
Q5950	B1BACD000017	TRANSISTOR	[M]
Q5951	2SB621ARSTA	TRANSISTOR	[M]
Q5952	B1GACFJJ0016	TRANSISTOR	[M]
Q5953	B1AACF000064	TRANSISTOR	[M]
Q6411	B1ACKD000004	TRANSISTOR	[M]
Q6415	B1ACKD000004	TRANSISTOR	[M]
Q6421	B1GACFLL0007	TRANSISTOR	[M]
Q6425	B1GACFLL0007	TRANSISTOR	[M]
Q6457	B1GACFLL0007	TRANSISTOR	[M]
Q7601	B1ADCF000001	TRANSISTOR	[M]
		DIODES	
D1	B3NAA0000096	DIODE	[M]
D1	B0CAAD000002	DIODE	[M]
D2	B0BA4R600003	DIODE	[M]
D2	B0CAAD000002	DIODE	[M]
D3	B0CAAD000002	DIODE	[M]
D951	MA2C16500E	DIODE	[M]
D971	MA2C16500E	DIODE	[M]
D1003	B0ACCK000005	DIODE	[M]
D1004	B0BC3R700004	DIODE	[M]
D2241	B0ACCK000005	DIODE	[M]
D2332	B0ADCC000002	DIODE	[M]
D2512	RB751V-40	DIODE	[M]
D2601	B0BC5R000009	DIODE	[M]
D2602	B0CDBB000015	DIODE	[M]
D2703	B0ACCK000005	DIODE	[M]
D2704	B0ACCK000005	DIODE	[M]
D2705	B0ACCK000005	DIODE	[M]
D2802	B0ADCJ000020	DIODE	[M]
D2804	B0ACCK000005	DIODE	[M]
D2811	B0ADCJ000020	DIODE	[M]
D2813	B0ACCK000005	DIODE	[M]
D2901	B0ADCC000002	DIODE	[M]
D2904	B0EAKM000117	DIODE	[M]
D2936	B0EAKM000117	DIODE	[M]
D2951	B0BC7R500001	DIODE	[M]
D5801	B0BA9R600002	DIODE	[M]
D5802	B0BA01500003	DIODE	[M]
D5803	B0BA01500003	DIODE	[M]
D5804	B0AACK000004	DIODE	[M]
D5805	B0EAKM000117	DIODE	[M]
D5807	B0EAKM000117	DIODE	[M]
D5808	B0BA5R600016	DIODE	[M]
D5809	B0BA9R600002	DIODE	[M]
D5813	B0AACK000004	DIODE	[M]
D5814	B0AACK000004	DIODE	[M]
D5950	B0EAMM000038	DIODE	[M]
D5951	B0EAMM000038	DIODE	[M]
D5952	B0EAMM000038	DIODE	[M]
D5953	B0EAMM000038	DIODE	[M]
D5954	B0EAKM000117	DIODE	[M]
D5955	B0EAKM000117	DIODE	[M]
D5956	B0EAKM000117	DIODE	[M]
D5957	B0EAKM000117	DIODE	[M]
D5958	B0EAKM000117	DIODE	[M]
D5959	B0EAKM000117	DIODE	[M]
D5960	MTZJ30ATA	DIODE	[M]
D5961	B0EAKM000117	DIODE	[M]
D5962	B0EAKM000117	DIODE	[M]
D5963	B0EAKM000117	DIODE	[M]
D5964	B0BA6R600008	DIODE	[M]
D5965	B0AACK000004	DIODE	[M]
D5966	B0EAKM000117	DIODE	[M]
D6457	B3AAA0000583	DIODE	[M]
D6458	B3AAA0000583	DIODE	[M]
D6635	B0BA5R600016	DIODE	[M]
		VARIABLE RESISTORS	
VR6491	EVEKE2F2524M	VR VOLUME JOG	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
		SWITCHES	
S951	K0J1BB000017	SW MODE	[M]
S952	RSH1A019-2U	SW HALF	[M]
S971	K0J1BB000017	SW MODE	[M]
S972	RSH1A019-2U	SW HALF	[M]
S975	RSH1A019-2U	SW RECINH_F	[M]
S6101	EVQ21405R	SW OPEN/CLOSE	[M]
S6102	EVQ21405R	SW CD 1	[M]
S6103	EVQ21405R	SW CD 2	[M]
S6104	EVQ21405R	SW CD 3	[M]
S6105	EVQ21405R	SW CD 4	[M]
S6106	EVQ21405R	SW CD 5	[M]
S6201	EVQ21405R	SW REW	[M]
S6202	EVQ21405R	SW TUNER	[M]
S6203	EVQ21405R	SW CD	[M]
S6204	EVQ21405R	SW FF	[M]
S6205	EVQ21405R	SW STOP	[M]
S6206	EVQ21405R	SW DECK 1/2	[M]
S6207	EVQ21405R	SW DECK 2 OPEN	[M]
S6208	EVQ21405R	SW TAPE	[M]
S6209	EVQ21405R	SW AUX	[M]
S6210	EVQ21405R	SW DECK 1 OPEN	[M]
S6301	EVQ21405R	SW POWER	[M]
S6303	EVQ21405R	SW SSEQ	[M]
S6304	EVQ21405R	SW REC	[M]
S6305	EVQ21405R	SW DEMO/DISPLAY	[M]
S7201	RSH1A043-U	SW REST	[M]
SW1	RSH1A032-U	SW PUSH	[M]
SW2	RSH1A032-U	SW PUSH	[M]
SW3	RSH1A005-1U	SW OPEN	[M]
SW4	K0L1BA000007	SW CD	[M]
SW5	K0L1BB000005	SW LOCK	[M]
		CONNECTORS	
CN1	K1MN14A00049	14P FFC CONNECTOR	[M]
CN971	K1MN10B00104	10P FFC CONNECTOR	[M]
CN1001	K1MN14B00058	14P CONNECTOR	[M]
CN2801	RJS1A9416-1	19P CONECTOR	[M]
CN2803	RJS1A9414-1	14P CONNECTOR	[M]
CN2805	RJS1A9414-1	14P CONNECTOR	[M]
CN2806	K1MN30A00046	36P FFC CONNECTOR	[M]
CN2808	K1KB12B00036	12P CONNECTOR	[M]
CN2809	K1KB12B00036	12P CONNECTOR	[M]
CN2810	K1KA02A00008	2P CONNECTOR	[M]
CN5800	K1KA12A00184	12P CONNECTOR	[M]
CN5801	K1KA12A00184	12P CONNECTOR	[M]
CN5950	K1KA09A00227	9P CONNECTOR	[M]
CN5951	K1KA09A00047	9P CONNECTOR	[M]
CN6601	K1MN30A00046	36P FFC CONNECTOR	[M]
CN7001	RJS2A8616	16P FPC CONNECTOR	[M]
CN7002	RJS1A9316	19P FFC CONNECTOR	[M]
CP6401	K1MN10B00104	10P FFC CONNECTOR	[M]
CS1001	K1MN05A00039	5P CONNECTOR	[M]
CS1002	K1MN05A00039	5P CONNECTOR	[M]
		CERAMIC FILTERS	
CF2601	J0B1075A0061	FM CF	[M]
CF2602	J0B1075A0061	FM CF	[M]
		COILS & TRANSFORMERS	
L1	RLQZP1R2KT-Y	COIL	[M]
L2	RLQZPR47KT-Y	COIL	[M]
L1001	G0C470JA0052	RF CHOKE COIL	[M]
L1002	7L1A62N	BIAS OSC COIL	[M]
L2601	GNS-A0882DC	AM COIL	[M]
L2602	G2BPC0000016	OSCILLATOR COIL	[M]
L2996	ERJ3GEY0R00V	CHIP JUMPER	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
T5950	ETP76VQTE1VA	TRANSFORMER	[M] ⚠
T5951	RTP1H3E002	BACK UP TRANSFORMER	[M] ⚠
		COMPONENT COMBINATIONS	
Z971	RGSD12A1445T	RADA RESISTOR	[M]
Z2602	G2BAD0000003	AM 1FT	[M]
Z5950	ERZV10V511CS	ZENER	[M] ⚠
Z6481	B3RAB0000040	IR SENSOR	[M]
		RELAY	
RL5950	K6B1AEA00015	SW POWER	[M] ⚠
		OSCILLATORS	
X2602	H3F1065A0002	DISCRIMINATOR	[M]
X2603	H0H720400005	CRYSTAL OSCILLATOR	[M]
X2801	H0A327200073	CRYSTAL OSCILLATOR	[M]
X2802	H2B100500004	CERAMIC RESONATORS	[M]
X7201	H2B169500002	RESONATOR	[M]
		DISPLAY TUBE	
FL6602	A2BD00000107	FL	[M]
		FUSE	
F1	K5D402APA008	4.0A FUSE	[M] ⚠
		FUSE HOLDERS	
FC1	K3GE1BA00021	FUSE CLIP	[M]
FC2	K3GE1BA00021	FUSE CLIP	[M]
		FUSE PROTECTORS	
FP5833	K5G400A00001	FUSE PROTECTOR	[M] ⚠
FP5950	K5G402A00010	FUSE PROTECTOR	[M] ⚠
FP5951	K5G102A00023	FUSE PROTECTOR	[M] ⚠
		HOLDERS	
H5950	RJS1A5509	9P CABLE HOLDER	[M]
H6555	K1YZ09000002	WIRE HOLDER	[M]
		JACKS	
JK2601	RJH5414-1	JK ANTENNA	[M]
JK2801	K2HA204B0153	JK 2P RCA	[M]
JK5950	K2AB2B000007	JK AC INLET	[M] ⚠
JK5951	K4BC04B00050	JK TERMINAL SPEAKER	[M]
JK5952	K4BC04B00046	JK SPEAKER	[M]
JK6551	K2HC103A0023	JK SMALL SIGN	[M]
		EARTH TERMINAL	
E5800	SNE1004-2	EARTH TERMINAL	[M]
		WIRES	
W1	REZ1023-1	4P WIRE	[M]
W2	REZ1024	3P WIRE	[M]
W1002	RWJ0102050CK	MAIN-MECHA MOTOR WIRE	[M]
W5950	REXX0325	9P FLAT WIRE	[M]
W6555	REXX0324	9P FLAT WIRE	[M]
		CHIP RESISTORS	
W2901	ERJ3GEY0R00V	0 1/16W	[M]
W2902	ERJ3GEY0R00V	0 1/16W	[M]
W2903	ERJ3GEY0R00V	0 1/16W	[M]
W2904	ERJ3GEY0R00V	0 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
W2905	ERJ3GEY0R00V	0 1/16W	[M]
W2906	ERJ3GEY0R00V	0 1/16W	[M]
W2907	ERJ3GEY0R00V	0 1/16W	[M]
W2908	ERJ3GEY0R00V	0 1/16W	[M]
W2909	ERJ3GEY0R00V	0 1/16W	[M]
W2910	ERJ3GEY0R00V	0 1/16W	[M]
W2911	ERJ3GEY0R00V	0 1/16W	[M]
W2912	ERJ3GEY0R00V	0 1/16W	[M]
W2913	ERJ3GEY0R00V	0 1/16W	[M]
W2915	ERJ3GEY0R00V	0 1/16W	[M]
W2917	ERJ3GEY0R00V	0 1/16W	[M]
W2918	ERJ3GEY0R00V	0 1/16W	[M]
W2919	ERJ3GEY0R00V	0 1/16W	[M]
W2920	ERJ3GEY0R00V	0 1/16W	[M]
W2921	ERJ3GEY0R00V	0 1/16W	[M]
W2922	ERJ3GEY0R00V	0 1/16W	[M]
W2923	ERJ3GEY0R00V	0 1/16W	[M]
W2924	ERJ3GEY0R00V	0 1/16W	[M]
W2925	ERJ3GEY0R00V	0 1/16W	[M]
W2926	ERJ3GEY0R00V	0 1/16W	[M]
W2927	ERJ3GEY0R00V	0 1/16W	[M]
W2928	ERJ3GEY0R00V	0 1/16W	[M]
W2929	ERJ3GEY0R00V	0 1/16W	[M]
W7001	ERJ3GEY0R00V	0 1/16W	[M]
W7002	ERJ3GEY0R00V	0 1/16W	[M]
W7003	ERJ3GEY0R00V	0 1/16W	[M]
W7004	ERJ3GEY0R00V	0 1/16W	[M]
W7005	ERJ3GEY0R00V	0 1/16W	[M]
W7006	ERJ3GEY0R00V	0 1/16W	[M]
W7007	ERJ3GEY0R00V	0 1/16W	[M]
W7008	ERJ3GEY0R00V	0 1/16W	[M]
W7009	ERJ3GEY0R00V	0 1/16W	[M]
W7010	ERJ3GEY0R00V	0 1/16W	[M]
W7011	ERJ3GEY0R00V	0 1/16W	[M]
W7012	ERJ3GEY0R00V	0 1/16W	[M]
W7013	ERJ3GEY0R00V	0 1/16W	[M]
W7014	ERJ3GEY0R00V	0 1/16W	[M]
W7015	ERJ3GEY0R00V	0 1/16W	[M]
W7016	ERJ3GEY0R00V	0 1/16W	[M]
W7017	ERJ3GEY0R00V	0 1/16W	[M]
W7018	ERJ3GEY0R00V	0 1/16W	[M]
W7019	ERJ3GEY0R00V	0 1/16W	[M]
W7020	ERJ3GEY0R00V	0 1/16W	[M]
W7021	ERJ3GEY0R00V	0 1/16W	[M]
W7022	ERJ3GEY0R00V	0 1/16W	[M]
W7023	ERJ3GEY0R00V	0 1/16W	[M]
W7024	ERJ3GEY0R00V	0 1/16W	[M]
W7025	ERJ3GEY0R00V	0 1/16W	[M]
W7027	ERJ3GEY0R00V	0 1/16W	[M]
W7028	ERJ3GEY0R00V	0 1/16W	[M]
W7033	ERJ3GEY0R00V	0 1/16W	[M]
W7034	ERJ3GEY0R00V	0 1/16W	[M]
W7040	ERJ3GEY0R00V	0 1/16W	[M]
W7041	ERJ3GEY0R00V	0 1/16W	[M]
W7042	ERJ3GEY0R00V	0 1/16W	[M]
W7043	ERJ3GEY0R00V	0 1/16W	[M]
W7044	ERJ3GEY0R00V	0 1/16W	[M]
W7050	ERJ3GEY0R00V	0 1/16W	[M]
W7051	ERJ3GEY0R00V	0 1/16W	[M]
W7052	ERJ3GEY0R00V	0 1/16W	[M]
W7053	ERJ3GEY0R00V	0 1/16W	[M]
W7054	ERJ3GEY0R00V	0 1/16W	[M]
W7055	ERJ3GEY0R00V	0 1/16W	[M]
		RESISTORS	
R1	ERDS2TJ102T	1K 1/4W	[M]
R1	ERDS2TJ104T	100K 1/4W	[M]
R2	ERDS2TJ104T	100K 1/4W	[M]
R3	ERDS2TJ221T	220 1/4W	[M]
R4	ERDS2TJ104T	100K 1/4W	[M]
R5	ERDS2TJ564T	560K 1/4W	[M]
R6	ERDS2TJ391T	390 1/4W	[M]
R7	ERDS2TJ272T	2.7K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R8	ERDS2TJ684T	680K 1/4W	[M]
R9	ERDS2TJ391T	390 1/4W	[M]
R10	ERDS2TJ391T	390 1/4W	[M]
R11	ERDS2TJ684T	680K 1/4W	[M]
R952	ERDS2TJ821T	820 1/4W	[M]
R953	ERDS2TJ393T	39K 1/4W	[M]
R972	ERDS2TJ821T	820 1/4W	[M]
R973	ERDS2TJ393T	39K 1/4W	[M]
R1001	ERJ3GEYJ1R0V	1 1/16W	[M]
R1002	ERJ3GEY0R00V	0 1/16W	[M]
R1003	ERJ3GEYJ103V	10K 1/16W	[M]
R1004	ERJ3GEYJ152V	1.5K 1/16W	[M]
R1005	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1007	ERD25FVJ4R7T	4.7 1/4W	[M]
R1009	ERJ3GEYJ183V	18K 1/16W	[M]
R1010	ERJ3GEYJ183V	18K 1/16W	[M]
R1011	ERJ3GEYJ103V	10K 1/16W	[M]
R1012	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1013	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1014	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1015	ERJ3GEYJ470V	47 1/16W	[M]
R1016	ERJ3GEYJ470V	47 1/16W	[M]
R1017	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1018	ERJ3GEYJ392V	3.9K 1/16W	[M]
R1019	ERJ3GEYJ392V	3.9K 1/16W	[M]
R1020	ERJ3GEY0R00V	0 1/16W	[M]
R1022	ERJ3GEYJ103V	10K 1/16W	[M]
R1024	ERJ3GEY0R00V	0 1/16W	[M]
R1025	ERJ3GEY0R00V	0 1/16W	[M]
R1026	ERJ3GEYJ102V	1K 1/16W	[M]
R1027	ERJ3GEY0R00V	0 1/16W	[M]
R1028	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1029	ERJ3GEYJ475V	4.7M 1/16W	[M]
R1030	ERJ3GEYJ101V	100 1/16W	[M]
R1031	ERJ3GEYJ273V	27K 1/16W	[M]
R1032	ERJ3GEYJ103V	10K 1/16W	[M]
R1035	ERJ3GEYJ103V	10K 1/16W	[M]
R1040	ERJ3GEY0R00V	0 1/16W	[M]
R1049	ERJ3GEY0R00V	0 1/16W	[M]
R1050	ERJ3GEY0R00V	0 1/16W	[M]
R1055	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1057	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1060	ERJ3GEYJ391V	390 1/16W	[M]
R1084	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1085	ERJ3GEYJ473V	47K 1/16W	[M]
R1086	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1087	ERJ3GEYJ473V	47K 1/16W	[M]
R1090	ERJ3GEYJ221V	220 1/16W	[M]
R1091	ERJ3GEY0R00V	0 1/16W	[M]
R1092	ERJ3GEY0R00V	0 1/16W	[M]
R1097	ERJ3GEYJ103V	10K 1/16W	[M]
R1098	ERJ3GEYJ103V	10K 1/16W	[M]
R1099	ERJ3GEY0R00V	0 1/16W	[M]
R1100	ERJ3GEY0R00V	0 1/16W	[M]
R1101	ERJ3GEY0R00V	0 1/16W	[M]
R2101	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2102	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2103	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2106	ERJ3GEYJ101V	100 1/16W	[M]
R2107	ERJ3GEYJ473V	47K 1/16W	[M]
R2108	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2111	ERJ3GEYJ103V	10K 1/16W	[M]
R2112	ERJ3GEYJ223V	22K 1/16W	[M]
R2113	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2116	ERJ3GEYJ123V	12K 1/16W	[M]
R2117	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2118	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2141	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2142	ERJ3GEYJ223V	22K 1/16W	[M]
R2143	ERJ3GEYJ104V	100K 1/16W	[M]
R2145	ERJ3GEYJ103V	10K 1/16W	[M]
R2146	ERJ3GEYJ102V	1K 1/16W	[M]
R2149	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2152	ERJ3GEY0R00V	0 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2154	ERJ3GEYJ104V	100K 1/16W	[M]
R2166	ERJ3GEYJ330V	33 1/16W	[M]
R2167	ERJ3GEYJ330V	33 1/16W	[M]
R2168	ERJ3GEYJ330V	33 1/16W	[M]
R2169	ERJ3GEYJ330V	33 1/16W	[M]
R2170	ERJ3GEYJ1R0V	1 1/16W	[M]
R2171	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2181	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2182	ERJ3GEYJ223V	22K 1/16W	[M]
R2183	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2184	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2191	ERJ3GEYJ102V	1K 1/16W	[M]
R2192	ERJ3GEY0R00V	0 1/16W	[M]
R2193	ERJ3GEYJ104V	100K 1/16W	[M]
R2197	ERJ3GEYJ102V	1K 1/16W	[M]
R2201	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2202	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2206	ERJ3GEYJ101V	100 1/16W	[M]
R2207	ERJ3GEYJ473V	47K 1/16W	[M]
R2211	ERJ3GEYJ103V	10K 1/16W	[M]
R2212	ERJ3GEYJ223V	22K 1/16W	[M]
R2216	ERJ3GEYJ123V	12K 1/16W	[M]
R2217	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2241	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2242	ERJ3GEYJ223V	22K 1/16W	[M]
R2243	ERJ3GEYJ104V	100K 1/16W	[M]
R2245	ERJ3GEYJ103V	10K 1/16W	[M]
R2246	ERJ3GEYJ102V	1K 1/16W	[M]
R2247	ERJ3GEYJ104V	100K 1/16W	[M]
R2248	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2249	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2252	ERJ3GEY0R00V	0 1/16W	[M]
R2254	ERJ3GEYJ104V	100K 1/16W	[M]
R2266	ERJ3GEYJ330V	33 1/16W	[M]
R2267	ERJ3GEYJ330V	33 1/16W	[M]
R2268	ERJ3GEYJ330V	33 1/16W	[M]
R2269	ERJ3GEYJ330V	33 1/16W	[M]
R2270	ERJ3GEYJ1R0V	1 1/16W	[M]
R2271	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2281	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2282	ERJ3GEYJ223V	22K 1/16W	[M]
R2283	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2284	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2291	ERJ3GEYJ102V	1K 1/16W	[M]
R2292	ERJ3GEY0R00V	0 1/16W	[M]
R2293	ERJ3GEYJ104V	100K 1/16W	[M]
R2297	ERJ3GEYJ102V	1K 1/16W	[M]
R2301	ERJ3GEYJ473V	47K 1/16W	[M]
R2302	ERJ3GEYJ153V	15K 1/16W	[M]
R2303	ERJ3GEYJ334V	330K 1/16W	[M]
R2304	ERJ3GEYJ823V	82K 1/16W	[M]
R2311	ERJ3GEY0R00V	0 1/16W	[M]
R2316	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2317	ERJ3GEYJ104V	100K 1/16W	[M]
R2318	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2320	ERJ3GEY0R00V	0 1/16W	[M]
R2331	ERJ3GEY0R00V	0 1/16W	[M]
R2332	ERJ3GEYJ393V	39K 1/16W	[M]
R2333	ERJ3GEY0R00V	0 1/16W	[M]
R2337	ERJ3GEYJ474V	470K 1/16W	[M]
R2338	ERJ3GEYJ102V	1K 1/16W	[M]
R2339	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2401	ERJ3GEYJ473V	47K 1/16W	[M]
R2402	ERJ3GEYJ153V	15K 1/16W	[M]
R2403	ERJ3GEYJ334V	330K 1/16W	[M]
R2404	ERJ3GEYJ823V	82K 1/16W	[M]
R2411	ERJ3GEY0R00V	0 1/16W	[M]
R2416	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2417	ERJ3GEYJ104V	100K 1/16W	[M]
R2418	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2420	ERJ3GEY0R00V	0 1/16W	[M]
R2439	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2501	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2502	ERJ3GEYJ563V	56K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2503	ERJ3GEYJ154V	150K 1/16W	[M]
R2511	ERJ3GEYJ224V	220K 1/16W	[M]
R2512	ERJ3GEY0R00V	0 1/16W	[M]
R2513	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2514	ERJ3GEYJ104V	100K 1/16W	[M]
R2515	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2516	ERJ3GEYJ102V	1K 1/16W	[M]
R2517	ERJ3GEYJ104V	100K 1/16W	[M]
R2518	ERJ3GEYJ104V	100K 1/16W	[M]
R2519	ERJ3GEYJ183V	18K 1/16W	[M]
R2520	ERJ3GEYJ103V	10K 1/16W	[M]
R2521	ERJ3GEYJ103V	10K 1/16W	[M]
R2522	ERJ3GEYJ103V	10K 1/16W	[M]
R2523	ERJ3GEYJ104V	100K 1/16W	[M]
R2524	ERJ3GEYJ102V	1K 1/16W	[M]
R2525	ERJ3GEYJ104V	100K 1/16W	[M]
R2527	ERJ3GEYJ102V	1K 1/16W	[M]
R2531	ERJ3GEY0R00V	0 1/16W	[M]
R2532	ERJ3GEY0R00V	0 1/16W	[M]
R2533	ERJ3GEYJ103V	10K 1/16W	[M]
R2534	ERJ3GEYJ152V	1.5K 1/16W	[M]
R2535	ERJ3GEYJ333V	33K 1/16W	[M]
R2537	ERJ3GEYJ102V	1K 1/16W	[M]
R2538	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2539	ERJ3GEYJ104V	100K 1/16W	[M]
R2571	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2582	ERJ3GEY0R00V	0 1/16W	[M]
R2584	ERJ3GEYJ334V	330K 1/16W	[M]
R2585	ERJ3GEYJ334V	330K 1/16W	[M]
R2586	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2587	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2591	ERJ3GEYJ334V	330K 1/16W	[M]
R2592	ERJ3GEY0R00V	0 1/16W	[M]
R2601	ERJ3GEY0R00V	0 1/16W	[M]
R2602	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2603	ERJ3GEYJ271V	270 1/16W	[M]
R2604	ERJ3GEYJ102V	1K 1/16W	[M]
R2605	ERJ3GEYJ471V	470 1/16W	[M]
R2606	ERJ3GEYJ474V	470K 1/16W	[M]
R2607	ERJ3GEYJ331V	330 1/16W	[M]
R2610	ERJ3GEYJ102V	1K 1/16W	[M]
R2611	ERJ3GEYJ391V	390 1/16W	[M]
R2612	ERJ3GEYJ104V	100K 1/16W	[M]
R2613	ERJ3GEYJ103V	10K 1/16W	[M]
R2614	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2615	ERJ3GEYJ561V	560 1/16W	[M]
R2616	ERJ3GEYJ102V	1K 1/16W	[M]
R2617	ERJ3GEYJ473V	47K 1/16W	[M]
R2618	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2619	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2620	ERJ3GEYJ473V	47K 1/16W	[M]
R2621	ERJ3GEYJ223V	22K 1/16W	[M]
R2622	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2623	ERJ3GEYJ683V	68K 1/16W	[M]
R2624	ERJ3GEYJ330V	33 1/16W	[M]
R2625	ERJ3GEYJ471V	470 1/16W	[M]
R2626	ERJ3GEYJ102V	1K 1/16W	[M]
R2627	ERJ3GEYJ471V	470 1/16W	[M]
R2628	ERJ3GEYJ820V	82 1/16W	[M]
R2629	ERJ3GEYJ273V	27K 1/16W	[M]
R2630	ERJ3GEYJ103V	10K 1/16W	[M]
R2631	ERJ3GEYJ121V	120 1/16W	[M]
R2632	ERJ3GEYJ103V	10K 1/16W	[M]
R2633	ERJ3GEYJ102V	1K 1/16W	[M]
R2634	ERJ3GEYJ471V	470 1/16W	[M]
R2635	ERJ3GEYJ102V	1K 1/16W	[M]
R2636	ERJ3GEYJ102V	1K 1/16W	[M]
R2637	ERJ3GEYJ102V	1K 1/16W	[M]
R2638	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2641	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2642	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2643	ERJ3GEYJ223V	22K 1/16W	[M]
R2644	ERJ3GEYJ121V	120 1/16W	[M]
R2645	ERJ3GEYJ104V	100K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2646	ERJ3GEYJ104V	100K 1/16W	[M]
R2651	ERJ3GEYJ820V	82 1/16W	[M]
R2652	ERJ3GEY0R00V	0 1/16W	[M]
R2701	ERJ3GEYJ225V	2.2M 1/16W	[M]
R2702	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2704	ERJ3GEY0R00V	0 1/16W	[M]
R2705	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2706	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2707	ERJ3GEYJ102V	1K 1/16W	[M]
R2708	ERJ3GEYJ103V	10K 1/16W	[M]
R2709	ERJ3GEYJ104V	100K 1/16W	[M]
R2710	ERJ3GEYJ224V	220K 1/16W	[M]
R2711	ERJ3GEYJ101V	100 1/16W	[M]
R2712	ERDS1FVJ220T	22 1/2W	[M]
R2713	ERJ3GEYJ104V	100K 1/16W	[M]
R2714	ERJ3GEYJ124V	120K 1/16W	[M]
R2715	ERJ3GEYJ103V	10K 1/16W	[M]
R2801	ERJ3GEYJ103V	10K 1/16W	[M]
R2802	ERJ3GEYJ101V	100 1/16W	[M]
R2803	ERJ3GEYJ103V	10K 1/16W	[M]
R2804	ERJ3GEYJ473V	47K 1/16W	[M]
R2805	ERJ3GEYJ473V	47K 1/16W	[M]
R2806	ERJ3GEYJ103V	10K 1/16W	[M]
R2807	ERJ3GEYJ103V	10K 1/16W	[M]
R2810	ERJ3GEYJ223V	22K 1/16W	[M]
R2811	ERJ3GEY0R00V	0 1/16W	[M]
R2817	ERJ3GEYJ104V	100K 1/16W	[M]
R2818	ERJ3GEYJ104V	100K 1/16W	[M]
R2819	ERJ3GEYJ104V	100K 1/16W	[M]
R2820	ERJ3GEYJ104V	100K 1/16W	[M]
R2821	ERJ3GEYJ104V	100K 1/16W	[M]
R2822	ERJ3GEYJ104V	100K 1/16W	[M]
R2823	ERJ3GEYJ104V	100K 1/16W	[M]
R2824	ERJ3GEYJ104V	100K 1/16W	[M]
R2834	ERJ3GEYJ102V	1K 1/16W	[M]
R2841	ERJ3GEYJ103V	10K 1/16W	[M]
R2842	ERJ3GEYJ103V	10K 1/16W	[M]
R2843	ERJ3GEYJ102V	1K 1/16W	[M]
R2844	ERJ3GEYJ103V	10K 1/16W	[M]
R2845	ERJ3GEYJ103V	10K 1/16W	[M]
R2846	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2856	ERJ3GEYJ101V	100 1/16W	[M]
R2857	ERJ3GEYJ101V	100 1/16W	[M]
R2858	ERJ3GEYJ101V	100 1/16W	[M]
R2859	ERJ3GEYJ101V	100 1/16W	[M]
R2860	ERJ3GEYJ101V	100 1/16W	[M]
R2861	ERJ3GEYJ101V	100 1/16W	[M]
R2862	ERJ3GEYJ101V	100 1/16W	[M]
R2867	ERJ3GEYJ104V	100K 1/16W	[M]
R2876	ERJ3GEYJ223V	22K 1/16W	[M]
R2877	ERJ3GEYJ223V	22K 1/16W	[M]
R2878	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2881	ERJ3GEYJ221V	220 1/16W	[M]
R2882	ERJ3GEYJ106V	10M 1/16W	[M]
R2883	ERJ3GEYJ334V	330K 1/16W	[M]
R2886	ERJ3GEYJ105V	1M 1/16W	[M]
R2891	ERJ3GEYJ473V	47K 1/16W	[M]
R2892	ERJ3GEY0R00V	0 1/16W	[M]
R2899	ERJ3GEYJ473V	47K 1/16W	[M]
R2901	ERJ3GEYJ103V	10K 1/16W	[M]
R2902	ERDS1FVJ120T	12 1/2W	[M]
R2903	ERDS1FVJ150T	15 1/2W	[M]
R2907	ERJ3GEYJ102V	1K 1/16W	[M]
R2908	ERJ3GEYJ331V	330 1/16W	[M]
R2909	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2910	ERJ3GEYJ331V	330 1/16W	[M]
R2911	ERJ3GEY0R00V	0 1/16W	[M]
R2912	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2913	ERJ3GEY0R00V	0 1/16W	[M]
R2914	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2915	ERJ3GEY0R00V	0 1/16W	[M]
R2916	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2917	ERJ3GEY0R00V	0 1/16W	[M]
R2918	ERJ3GEYJ103V	10K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2919	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2920	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2921	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2922	ERJ3GEYJ103V	10K 1/16W	[M]
R2923	ERJ3GEY0R00V	0 1/16W	[M]
R2924	ERJ3GEYJ103V	10K 1/16W	[M]
R2925	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2926	ERJ3GEY0R00V	0 1/16W	[M]
R2927	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2928	ERJ3GEYJ103V	10K 1/16W	[M]
R2929	ERJ3GEYJ103V	10K 1/16W	[M]
R2930	ERJ3GEYJ103V	10K 1/16W	[M]
R2931	ERJ3GEYJ103V	10K 1/16W	[M]
R2932	ERJ3GEY0R00V	0 1/16W	[M]
R2933	ERJ3GEY0R00V	0 1/16W	[M]
R2936	ERJ3GEYJ102V	1K 1/16W	[M]
R2937	ERJ3GEYJ103V	10K 1/16W	[M]
R2938	ERJ3GEYJ123V	12K 1/16W	[M]
R2939	ERJ3GEYJ223V	22K 1/16W	[M]
R2940	ERJ3GEYJ221V	220 1/16W	[M]
R2941	ERJ3GEYJ123V	12K 1/16W	[M]
R2942	ERJ3GEYJ223V	22K 1/16W	[M]
R2943	ERJ3GEYJ103V	10K 1/16W	[M]
R2944	ERJ3GEYJ103V	10K 1/16W	[M]
R2945	ERJ3GEYJ473V	47K 1/16W	[M]
R2946	ERJ3GEYJ473V	47K 1/16W	[M]
R2952	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2953	ERJ3GEYJ103V	10K 1/16W	[M]
R2954	ERDS1FVJ270T	27 1/2W	[M]
R2976	ERJ3GEY0R00V	0 1/16W	[M]
R2977	ERJ3GEY0R00V	0 1/16W	[M]
R5245	ERDS2TJ332T	3.3K 1/4W	[M]
R5246	ERDS2TJ153T	15K 1/4W	[M]
R5247	ERDS2TJ332T	3.3K 1/4W	[M]
R5248	ERDS2TJ153T	15K 1/4W	[M]
R5249	ERDS2TJ683T	68K 1/4W	[M]
R5250	ERDS2TJ683T	68K 1/4W	[M]
R5251	ERDS2TJ154T	150K 1/4W	[M]
R5252	ERDS2TJ104T	100K 1/4W	[M]
R5255	ERDS1FVJ100T	10 1/2W	[M]
R5256	ERDS1FVJ100T	10 1/2W	[M]
R5445	ERDS2TJ332T	3.3K 1/4W	[M]
R5446	ERDS2TJ153T	15K 1/4W	[M]
R5447	ERDS2TJ332T	3.3K 1/4W	[M]
R5448	ERDS2TJ153T	15K 1/4W	[M]
R5449	ERDS2TJ683T	68K 1/4W	[M]
R5450	ERDS2TJ683T	68K 1/4W	[M]
R5451	ERDS2TJ563T	56K 1/4W	[M]
R5452	ERDS2TJ224T	220K 1/4W	[M]
R5455	ERDS1FVJ100T	10 1/2W	[M]
R5456	ERDS1FVJ100T	10 1/2W	[M]
R5801	ERDS2TJ103T	10K 1/4W	[M]
R5802	ERDS2TJ223T	22K 1/4W	[M]
R5804	ERDS2TJ473T	47K 1/4W	[M]
R5805	ERDS2TJ473T	47K 1/4W	[M]
R5806	ERDS2TJ104T	100K 1/4W	[M]
R5807	ERDS1FVJ271T	270 1/2W	[M]
R5808	ERDS1FVJ271T	270 1/2W	[M]
R5809	ERDS1FVJ391T	390 1/2W	[M]
R5810	ERDS2TJ272T	2.7K 1/4W	[M]
R5811	ERDS2TJ471T	470 1/4W	[M]
R5812	ERDS2TJ272T	2.7K 1/4W	[M]
R5813	ERDS2TJ332T	3.3K 1/4W	[M]
R5814	ERDS2TJ332T	3.3K 1/4W	[M]
R5816	ERDS1FVJ150T	15 1/2W	[M]
R5818	ERDS1FVJ8R2T	8.2 1/2W	[M]
R5819	ERDS1FVJ8R2T	8.2 1/2W	[M]
R5820	ERDS1FVJ8R2T	8.2 1/2W	[M]
R5821	ERDS1FVJ8R2T	8.2 1/2W	[M]
R5822	ERDS2TJ332T	3.3K 1/4W	[M]
R5823	ERDS2TJ471T	470 1/4W	[M]
R5824	ERDS2TJ2R2T	2.2 1/4W	[M]
R5825	ERDS2TJ2R2T	2.2 1/4W	[M]
R5826	ERDS2TJ2R2T	2.2 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R5827	ERDS2TJ2R2T	2.2 1/4W	[M]
R5828	ERDS2TJ103T	10K 1/4W	[M]
R5829	ERDS1FVJ331T	330 1/2W	[M]
R5830	ERDS2TJ122T	1.2K 1/4W	[M]
R5831	ERDS2TJ222T	2.2K 1/4W	[M]
R5832	ERDS2TJ151T	150 1/4W	[M]
R5834	ERDS1FVJ270T	27 1/2W	[M]
R5847	ERDS1FVJ220T	22 1/2W	[M]
R5853	ERDS2TJ224T	220K 1/4W	[M]
R5854	ERDS2TJ103T	10K 1/4W	[M]
R5855	ERDS2TJ223T	22K 1/4W	[M]
R5856	ERDS2TJ103T	10K 1/4W	[M]
R5857	ERDS2TJ223T	22K 1/4W	[M]
R5858	ERDS1FVJ8R2T	8.2 1/2W	[M]
R5950	ERC12UGK335D	3.3M 1/2W	[M]
R5951	ERDS2TJ332T	3.3K 1/4W	[M]
R5952	ERDS2TJ102T	1K 1/4W	[M]
R5953	ERDS2TJ151T	150 1/4W	[M]
R5954	ERDS1FVJ100T	10 1/2W	[M]
R5955	ERDS1FVJ100T	10 1/2W	[M]
R5956	ERDS1FVJ100T	10 1/2W	[M]
R5957	ERDS2TJ103T	10K 1/4W	[M]
R5958	ERDS2TJ103T	10K 1/4W	[M]
R5960	ERDS2TJ472T	4.7K 1/4W	[M]
R5961	ERDS2TJ151T	150 1/4W	[M]
R5965	ERDS2TJ123T	12K 1/4W	[M]
R6102	ERDS2TJ102T	1K 1/4W	[M]
R6103	ERDS2TJ102T	1K 1/4W	[M]
R6104	ERDS2TJ122T	1.2K 1/4W	[M]
R6105	ERDS2TJ182T	1.8K 1/4W	[M]
R6106	ERDS2TJ222T	2.2K 1/4W	[M]
R6111	ERDS2TJ473T	47K 1/4W	[M]
R6199	ERDS2TJ103T	10K 1/4W	[M]
R6202	ERDS2TJ102T	1K 1/4W	[M]
R6203	ERDS2TJ102T	1K 1/4W	[M]
R6204	ERDS2TJ122T	1.2K 1/4W	[M]
R6205	ERDS2TJ182T	1.8K 1/4W	[M]
R6206	ERDS2TJ222T	2.2K 1/4W	[M]
R6207	ERDS2TJ272T	2.7K 1/4W	[M]
R6208	ERDS2TJ472T	4.7K 1/4W	[M]
R6209	ERDS2TJ682T	6.8K 1/4W	[M]
R6210	ERDS2TJ103T	10K 1/4W	[M]
R6302	ERDS2TJ102T	1K 1/4W	[M]
R6303	ERDS2TJ102T	1K 1/4W	[M]
R6304	ERDS2TJ122T	1.2K 1/4W	[M]
R6305	ERDS2TJ182T	1.8K 1/4W	[M]
R6399	ERDS2TJ103T	10K 1/4W	[M]
R6401	ERDS2TJ103T	10K 1/4W	[M]
R6402	ERDS2TJ103T	10K 1/4W	[M]
R6403	ERDS2TJ2R7T	2.7 1/4W	[M]
R6404	ERDS2TJ2R7T	2.7 1/4W	[M]
R6405	ERDS2TJ274T	270K 1/4W	[M]
R6406	ERDS2TJ274T	270K 1/4W	[M]
R6411	ERDS2TJ223T	22K 1/4W	[M]
R6412	ERDS2TJ102T	1K 1/4W	[M]
R6415	ERDS2TJ223T	22K 1/4W	[M]
R6416	ERDS2TJ102T	1K 1/4W	[M]
R6421	ERDS2TJ103T	10K 1/4W	[M]
R6425	ERDS2TJ103T	10K 1/4W	[M]
R6457	ERDS2TJ392T	3.9K 1/4W	[M]
R6458	ERDS2TJ472T	4.7K 1/4W	[M]
R6491	ERDS2TJ473T	47K 1/4W	[M]
R6492	ERDS2TJ473T	47K 1/4W	[M]
R6493	ERDS2TJ103T	10K 1/4W	[M]
R6601	ERDS2TJ471T	470 1/4W	[M]
R6602	ERDS2TJ471T	470 1/4W	[M]
R6603	ERDS2TJ221T	220 1/4W	[M]
R6604	ERDS2TJ221T	220 1/4W	[M]
R6611	ERDS2TJ153T	15K 1/4W	[M]
R6631	ERD2FCVG470T	47 1/4W	[M]
R6632	ERD2FCVG470T	47 1/4W	[M]
R6641	ERDS1FVJ120T	12 1/2W	[M]
R6642	ERDS1FVJ120T	12 1/2W	[M]
R6643	ERDS1FVJ120T	12 1/2W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R6644	ERDS1FVJ120T	12 1/2W	[M]
R7102	ERJ3GEYJ472V	4.7K 1/16W	[M]
R7104	ERJ3GEYJ102V	1K 1/16W	[M]
R7105	ERJ3GEYJ393V	39K 1/16W	[M]
R7106	ERJ3GEYJ102V	1K 1/16W	[M]
R7144	ERJ3GEYJ473V	47K 1/16W	[M]
R7211	ERJ3GEYJ823V	82K 1/16W	[M]
R7212	ERJ3GEYJ821V	820 1/16W	[M]
R7214	ERJ3GEYJ681V	680 1/16W	[M]
R7217	ERJ3GEYJ102V	1K 1/16W	[M]
R7218	ERJ3GEYJ102V	1K 1/16W	[M]
R7220	ERJ3GEYJ105V	1M 1/16W	[M]
R7221	ERJ3GEYJ101V	100 1/16W	[M]
R7253	ERJ3GEYJ100V	10 1/16W	[M]
R7254	ERJ3GEYJ102V	1K 1/16W	[M]
R7315	ERJ3GEYJ272V	2.7K 1/16W	[M]
R7323	ERJ3GEYJ562V	5.6K 1/16W	[M]
R7325	ERJ3GEYJ561V	560 1/16W	[M]
R7327	ERJ3GEYJ152V	1.5K 1/16W	[M]
R7328	ERJ3GEYJ183V	18K 1/16W	[M]
R7329	ERJ3GEYJ152V	1.5K 1/16W	[M]
R7331	ERJ3GEYJ223V	22K 1/16W	[M]
R7335	ERJ3GEYJ101V	100 1/16W	[M]
R7336	ERJ3GEYJ100V	10 1/16W	[M]
R7339	ERJ3GEYJ102V	1K 1/16W	[M]
R7349	ERJ3GEYJ153V	15K 1/16W	[M]
R7601	ERJ3GEYJ4R7V	4.7 1/16W	[M]
R7650	ERJ3GEYJ5R6V	5.6 1/16W	[M]
		CAPACITORS	
C1	ECEA1CKA101B	100 16V	[M]
C2	ECBT1E103ZF5	0.01 25V	[M]
C2	F1D1H102A029	1000P 50V	[M]
C3	ECBT1H2R2KC5	2.2P 50V	[M]
C4	ECBT1H181KB5	180P 50V	[M]
C5	ECBT1H5R6KC5	5.6P 50V	[M]
C6	ECBT1H3R3KC5	3.3P 50V	[M]
C7	ECBT1H4R7KC5	4.7P 50V	[M]
C8	ECBT1H3R3KC5	3.3P 50V	[M]
C9	ECBT1H2R2KC5	2.2P 50V	[M]
C10	ECBT1H180JC5	18P 50V	[M]
C11	F1D1H102A029	1000P 50V	[M]
C1002	ECEA1HKN2R2B	2.2 50V	[M]
C1006	ECEA1HKA010B	1 50V	[M]
C1007	F0A2A472A015	4700P 100V	[M]
C1008	ECEA1HKA010B	1 50V	[M]
C1009	ECEA1CKA470B	47 16V	[M]
C1010	ECA1EM101B	100 25V	[M]
C1011	ECQV1H473JZ3	0.047 50V	[M]
C1012	ECJ1VB1H102K	1000P 50V	[M]
C1013	ECJ1VB1H102K	1000P 50V	[M]
C1014	ECJ1VB1H102K	1000P 50V	[M]
C1015	ECJ1VB1H102K	1000P 50V	[M]
C1016	ECJ1VB1H222K	2200P 50V	[M]
C1017	ECJ1VB1H222K	2200P 50V	[M]
C1018	ECJ1VB1H103K	0.01 50V	[M]
C1019	ECJ1VB1H102K	1000P 50V	[M]
C1020	ECJ1VB1H471K	470P 50V	[M]
C1021	ECJ1VB1H471K	470P 50V	[M]
C1022	ECJ1VB1H102K	1000P 50V	[M]
C1023	ECJ1VB1H102K	1000P 50V	[M]
C1026	ECEA0JKA470B	47 6.3V	[M]
C1027	ECJ1VB1H102K	1000P 50V	[M]
C1030	ECEA1AKA101B	100 10V	[M]
C1031	ECA1AM101B	100 10V	[M]
C1032	F1C1C183A023	0.018 16V	[M]
C1033	F1C1C183A023	0.018 16V	[M]
C1034	ECEA1HKA3R3B	3.3 50V	[M]
C1035	ECEA1HKA3R3B	3.3 50V	[M]
C1036	ECJ1VB1C333K	0.033 16V	[M]
C1037	ECEA1HKA3R3B	3.3 50V	[M]
C1038	ECJ1VB1H221K	220P 50V	[M]
C1039	ECJ1VB1H221K	220P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C1040	ECEA1CKA100B	10 16V	[M]
C1041	ECEA1CKA100B	10 16V	[M]
C1042	ECEA1CKA220B	22 16V	[M]
C1043	ECEA1HKA4R7B	4.7 50V	[M]
C1044	ECEA1AKA330B	33 10V	[M]
C1045	ECEA1AKA220B	22 10V	[M]
C1046	ECA1CM221B	220 16V	[M]
C1049	ECJ1VB1H332K	3300P 50V	[M]
C1050	ECJ1VB1H332K	3300P 50V	[M]
C1056	ECEA1CKA100B	10 16V	[M]
C1057	ECJ1VB1H102K	1000P 50V	[M]
C1058	ECJ1VB1H102K	1000P 50V	[M]
C1059	ECJ1VB1H103K	0.01 50V	[M]
C2101	ECJ1VB1C105K	1 16V	[M]
C2102	ECJ1VB1C104K	0.1 16V	[M]
C2103	ECJ1VB1H102K	1000P 50V	[M]
C2106	ECJ1VB1H332K	3300P 50V	[M]
C2107	ECJ1VB1C104K	0.1 16V	[M]
C2108	ECJ1VB1H102K	1000P 50V	[M]
C2111	ECJ1VB1C104K	0.1 16V	[M]
C2112	ECJ1VB1H152K	1500P 50V	[M]
C2114	ECJ1VB1H103K	0.01 50V	[M]
C2116	ECJ1VB1H681K	680P 50V	[M]
C2117	ECJ1VC1H101K	100P 50V	[M]
C2118	ECJ1VB1C104K	0.1 16V	[M]
C2119	ECJ1VB1H102K	1000P 50V	[M]
C2120	ECJ1VB1C105K	1 16V	[M]
C2121	ECJ1VB1C104K	0.1 16V	[M]
C2126	ECJ1VB1C104K	0.1 16V	[M]
C2131	ECUV1C224KBV	0.22 16V	[M]
C2136	ECUV1C224KBV	0.22 16V	[M]
C2141	ECJ1VB1C105K	1 16V	[M]
C2142	ECJ1VB1C105K	1 16V	[M]
C2151	ECA1CM100B	10 16V	[M]
C2166	ECJ1VB1H102K	1000P 50V	[M]
C2181	ECJ1VB1H822K	8200P 50V	[M]
C2182	ECJ1VB1H822K	8200P 50V	[M]
C2183	ECJ1VB1C105K	1 16V	[M]
C2184	ECJ1VB1H152K	1500P 50V	[M]
C2191	ERJ3GEY0R00V	0 1/16W	[M]
C2192	ERJ3GEY0R00V	0 1/16W	[M]
C2193	ECJ1VB1C104K	0.1 16V	[M]
C2194	ECEA1CKA100B	10 16V	[M]
C2201	ECJ1VB1C105K	1 16V	[M]
C2202	ECJ1VB1C104K	0.1 16V	[M]
C2203	ECJ1VB1H102K	1000P 50V	[M]
C2206	ECJ1VB1H332K	3300P 50V	[M]
C2207	ECJ1VB1C104K	0.1 16V	[M]
C2208	ECJ1VB1H102K	1000P 50V	[M]
C2211	ECJ1VB1C104K	0.1 16V	[M]
C2212	ECJ1VB1H152K	1500P 50V	[M]
C2214	ECJ1VB1H103K	0.01 50V	[M]
C2216	ECJ1VB1H681K	680P 50V	[M]
C2217	ECJ1VC1H101K	100P 50V	[M]
C2218	ECJ1VB1C104K	0.1 16V	[M]
C2219	ECJ1VB1H102K	1000P 50V	[M]
C2220	ECJ1VB1C105K	1 16V	[M]
C2221	ECJ1VB1C104K	0.1 16V	[M]
C2226	ECJ1VB1C104K	0.1 16V	[M]
C2231	ECJ1VB1C104K	0.1 16V	[M]
C2236	ECJ1VB1C104K	0.1 16V	[M]
C2241	ECJ1VB1C105K	1 16V	[M]
C2242	ECJ1VB1C105K	1 16V	[M]
C2245	ECA1CM100B	10 16V	[M]
C2251	ECA1CM100B	10 16V	[M]
C2266	ECJ1VB1H102K	1000P 50V	[M]
C2281	ECJ1VB1H822K	8200P 50V	[M]
C2282	ECJ1VB1H822K	8200P 50V	[M]
C2283	ECJ1VB1C105K	1 16V	[M]
C2284	ECJ1VB1H152K	1500P 50V	[M]
C2291	ERJ3GEY0R00V	0 1/16W	[M]
C2292	ERJ3GEY0R00V	0 1/16W	[M]
C2293	ECJ1VB1C104K	0.1 16V	[M]
C2294	ECEA1CKA100B	10 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2301	ECJ1VC1H100J	10P 50V	[M]
C2302	ECJ1VC1H470J	47P 50V	[M]
C2311	ECJ1VB1A184K	0.18 10V	[M]
C2312	ECJ1VB1A154K	0.15 10V	[M]
C2331	ECJ1VB1C105K	1 16V	[M]
C2332	ERJ3GEY0R00V	0 1/16W	[M]
C2334	ECUV1C224KBV	0.22 16V	[M]
C2401	ECJ1VC1H100J	10P 50V	[M]
C2402	ECJ1VC1H470J	47P 50V	[M]
C2411	ECJ1VB1A184K	0.18 10V	[M]
C2412	ECJ1VB1A154K	0.15 10V	[M]
C2501	ECEA1HKN2R2B	2.2 50V	[M]
C2511	ECJ1VB1H223K	0.022 50V	[M]
C2512	ECJ1VB1A474K	0.47 10V	[M]
C2513	ECJ1VB1C104K	0.1 16V	[M]
C2520	ECJ1VB1H103K	0.01 50V	[M]
C2521	ECJ1VB1H103K	0.01 50V	[M]
C2522	ECJ1VB1C105K	1 16V	[M]
C2523	ECJ1VB1C105K	1 16V	[M]
C2525	ECJ1VB1C105K	1 16V	[M]
C2526	ECJ1VB1H221K	220P 50V	[M]
C2527	ECJ1VB1C105K	1 16V	[M]
C2553	ECJ1VB1H103K	0.01 50V	[M]
C2557	ECJ1VB1H103K	0.01 50V	[M]
C2581	ECA1AM330B	33 10V	[M]
C2582	ECA1CM101B	100 16V	[M]
C2583	ECUV1C224KBV	0.22 16V	[M]
C2584	ECJ1VB1H221K	220P 50V	[M]
C2585	ECJ1VB1H221K	220P 50V	[M]
C2588	ECJ1VB1C104K	0.1 16V	[M]
C2601	ECJ1VB1H103K	0.01 50V	[M]
C2602	ECEA1CKA100B	10 16V	[M]
C2603	ECJ1VB1H103K	0.01 50V	[M]
C2604	ECJ1VB1H102K	1000P 50V	[M]
C2606	ECJ1VB1H103K	0.01 50V	[M]
C2607	ECJ1VB1E473K	0.047 25V	[M]
C2608	ECJ1VC1H080D	8P 50V	[M]
C2609	ECJ1VB1H102K	1000P 50V	[M]
C2610	ECJ1VB1H103K	0.01 50V	[M]
C2611	ECEA1HKA4R7B	4.7 50V	[M]
C2612	ECJ1VB1H103K	0.01 50V	[M]
C2613	ECJ1VB1H102K	1000P 50V	[M]
C2614	ECEA1HKA3R3B	3.3 50V	[M]
C2615	ECEA1HKA4R7B	4.7 50V	[M]
C2616	ECJ1VB1C333K	0.033 16V	[M]
C2617	ECJ1VB1H103K	0.01 50V	[M]
C2618	ECJ1VB1H103K	0.01 50V	[M]
C2619	F0A2A681A010	680P 100V	[M]
C2620	ECEA1CKA100B	10 16V	[M]
C2621	ECEA1HKAR47B	0.47 50V	[M]
C2622	ECEA1HKA010B	1 50V	[M]
C2623	ECEA1HKA010B	1 50V	[M]
C2624	ECJ1VC1H101K	100P 50V	[M]
C2625	ECEA1CKA220B	22 16V	[M]
C2626	ECJ2VF1C105Z	1 16V	[M]
C2627	ECEA1CKA220B	22 16V	[M]
C2629	ECA0JM101B	100 6.3V	[M]
C2630	ECA0JM101B	100 6.3V	[M]
C2631	ECJ1VC1H151J	150P 50V	[M]
C2632	ECJ1VB1H102K	1000P 50V	[M]
C2633	ECJ1VC1H120J	12P 50V	[M]
C2634	ECJ1VC1H120J	12P 50V	[M]
C2636	ECJ1VB1H102K	1000P 50V	[M]
C2637	ECJ1VB1H332K	3300P 50V	[M]
C2638	ECJ1VB1H103K	0.01 50V	[M]
C2639	ECEA1HKA4R7B	4.7 50V	[M]
C2641	ECEA1HKA010B	1 50V	[M]
C2642	ECEA1HKA010B	1 50V	[M]
C2643	ECJ1VB1H682K	6800P 50V	[M]
C2644	ECJ1VB1H682K	6800P 50V	[M]
C2647	ECJ1VB1H102K	1000P 50V	[M]
C2648	ECJ1VB1H103K	0.01 50V	[M]
C2649	ECJ1VF1C104Z	0.1 16V	[M]
C2701	ECJ1VB1H103K	0.01 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2705	ECA1CM100B	10 16V	[M]
C2706	ECJ1VB1H103K	0.01 50V	[M]
C2707	ECEA1AKN100B	10 10V	[M]
C2708	ECA1CM101B	100 16V	[M]
C2751	ECJ1VB1C104K	0.1 16V	[M]
C2753	ECJ1VB1C104K	0.1 16V	[M]
C2811	ECJ1VC1H101K	100P 50V	[M]
C2812	ECJ1VC1H101K	100P 50V	[M]
C2813	ECJ1VC1H101K	100P 50V	[M]
C2814	ECJ1VC1H101K	100P 50V	[M]
C2815	ECJ1VC1H101K	100P 50V	[M]
C2816	ECJ1VC1H101K	100P 50V	[M]
C2817	ECJ1VC1H101K	100P 50V	[M]
C2818	ECJ1VC1H101K	100P 50V	[M]
C2819	ECJ1VC1H101K	100P 50V	[M]
C2820	ECJ1VC1H101K	100P 50V	[M]
C2821	ECJ1VC1H101K	100P 50V	[M]
C2831	ECJ1VB1C223K	0.022 16V	[M]
C2832	ECJ1VB1H331K	330P 50V	[M]
C2833	ECJ1VB1H331K	330P 50V	[M]
C2840	ECJ1VC1H180J	18P 50V	[M]
C2841	ECJ1VC1H180J	18P 50V	[M]
C2851	ECJ1VB1C104K	0.1 16V	[M]
C2852	ECA1CM101B	100 16V	[M]
C2853	ECJ1VB1C104K	0.1 16V	[M]
C2854	ECA1CM101B	100 16V	[M]
C2856	ECJ1VB1C105K	1 16V	[M]
C2857	ECEA1HKA2R2B	2.2 50V	[M]
C2901	ECJ1VB1C104K	0.1 16V	[M]
C2902	ECA1CM100B	10 16V	[M]
C2903	ECJ1VB1H103K	0.01 50V	[M]
C2904	ECA1CM101B	100 16V	[M]
C2905	ECA1CM101B	100 16V	[M]
C2906	ECJ1VB1H102K	1000P 50V	[M]
C2907	ECJ1VB1H471K	470P 50V	[M]
C2936	ECJ1VF1C474Z	0.47 16V	[M]
C2951	ECJ1VB1H103K	0.01 50V	[M]
C2952	ECJ1VB1H103K	0.01 50V	[M]
C2976	ECA1CM100B	10 16V	[M]
C2977	ECA1CM101B	100 16V	[M]
C2998	ECJ1VB1C104K	0.1 16V	[M]
C2999	ECJ1VB1C104K	0.1 16V	[M]
C5240	ECBT1H222KB5	2200P 50V	[M]
C5241	ECBT1H390J5	39P 50V	[M]
C5242	ECBT1H222KB5	2200P 50V	[M]
C5243	ECBT1H390J5	39P 50V	[M]
C5244	F1D1H473A012	0.047 50V	[M]
C5245	F1D1H473A012	0.047 50V	[M]
C5440	ECBT1H222KB5	2200P 50V	[M]
C5441	ECBT1H390J5	39P 50V	[M]
C5442	ECBT1H222KB5	2200P 50V	[M]
C5443	ECBT1H390J5	39P 50V	[M]
C5444	F1D1H473A012	0.047 50V	[M]
C5445	F1D1H473A012	0.047 50V	[M]
C5801	ECBT1H103KB5	0.01 50V	[M]
C5802	ECA0JM221B	220 6.3V	[M]
C5803	ECBT1H102KB5	1000P 50V	[M]
C5804	ECBT1H103KB5	0.01 50V	[M]
C5805	ECEA1CKA101B	100 16V	[M]
C5806	ECBT1H103KB5	0.01 50V	[M]
C5807	ECEA1CKA100B	10 16V	[M]
C5808	ECEA1CKA100B	10 16V	[M]
C5809	ECBT1H103KB5	0.01 50V	[M]
C5810	ECA1EM101B	100 25V	[M]
C5811	ECBT1H103KB5	0.01 50V	[M]
C5812	ECEA1EKA330B	33 25V	[M]
C5813	ECEA1EKA100B	10 25V	[M]
C5814	ECBT1H103KB5	0.01 50V	[M]
C5820	ECA1HM222B	2200 50V	[M]
C5838	ECEA1HKA2R2B	2.2 50V	[M]
C5840	ECA1HM222B	2200 50V	[M]
C5950	ECA1CM222B	2200 16V	[M]
C5951	ECKR1H103ZF5	0.01 50V	[M]
C5952	ECA1AM470B	47 10V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C5953	ECKR1H103ZF5	0.01 50V	[M]
C5954	ECKR1H103ZF5	0.01 50V	[M]
C5955	ECA1HM220B	22 50V	[M]
C5956	ECA1HM470B	47 50V	[M]
C5957	ECA1HM100B	10 50V	[M]
C5958	ECKR1H103ZF5	0.01 50V	[M]
C5959	ECKR1H103ZF5	0.01 50V	[M]
C5960	ECQE2104KF3	0.1 250V	[M]
C5961	ECA1AM471B	470 10V	[M]
C5962	ECA1AM471B	470 10V	[M]
C5963	ECEA1VKA4R7B	4.7 35V	[M]
C6481	ECEA0JKA470B	47 6.3V	[M]
C6491	ECBT1H101KB5	100P 50V	[M]
C6492	ECBT1H101KB5	100P 50V	[M]
C6551	ECBT1E103ZF5	0.01 25V	[M]
C6552	ECBT1E103ZF5	0.01 25V	[M]
C6553	ECBT1E103ZF5	0.01 25V	[M]
C6601	ECBT1H101KB5	100P 50V	[M]
C6602	ECBT1H102KB5	1000P 50V	[M]
C6603	ECBT1H101KB5	100P 50V	[M]
C6604	ECBT1H101KB5	100P 50V	[M]
C6612	ECBT1H270J5	27P 50V	[M]
C6621	ECBT1H101KB5	100P 50V	[M]
C6623	ECEA0JKA470B	47 6.3V	[M]
C6631	ECEA1VKA220B	22 35V	[M]
C6632	ECEA1VKA220B	22 35V	[M]
C6635	ECEA1HKA3R3B	3.3 50V	[M]
C6636	ECBT1H101KB5	100P 50V	[M]
C7102	ECJ1VB1A474K	0.47 10V	[M]
C7105	ECJ1VB1C104K	0.1 16V	[M]
C7106	ECJ1VB1C104K	0.1 16V	[M]
C7107	ECJ1VB1H223K	0.022 50V	[M]
C7110	ECJ1VB1H471K	470P 50V	[M]
C7142	ECJ1VB1H223K	0.022 50V	[M]
C7147	ECJ1VB1H391K	390P 50V	[M]
C7149	ECJ1VB1H392K	3900P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C7155	ECJ1VB1C104K	0.1 16V	[M]
C7161	ECJ1VB1C104K	0.1 16V	[M]
C7166	ECJ1VB1H103K	0.01 50V	[M]
C7203	ECEA0JKA221I	220 6.3V	[M]
C7204	ECJ1VB1C104K	0.1 16V	[M]
C7216	ECJ1VB1H681K	680P 50V	[M]
C7217	ECJ1VB1C104K	0.1 16V	[M]
C7218	ECJ1VB1C823K	0.082 16V	[M]
C7223	ECEA0JKA101I	100 6.3V	[M]
C7224	ECJ1VB1C104K	0.1 16V	[M]
C7225	ECJ1VB1H102K	1000P 50V	[M]
C7226	ECJ1VB1H102K	1000P 50V	[M]
C7230	ECJ1VB1C104K	0.1 16V	[M]
C7231	ECEA0JKA221I	220 6.3V	[M]
C7232	ECEA0JKA221I	220 6.3V	[M]
C7233	ECJ1VF1C104Z	0.1 16V	[M]
C7234	ECEA1CKA100I	10 16V	[M]
C7235	ECEA1CKA100I	10 16V	[M]
C7241	ECJ1VB1H102K	1000P 50V	[M]
C7243	ECJ1VF1C104Z	0.1 16V	[M]
C7244	ECJ1VB1C153K	0.015 16V	[M]
C7253	ECJ1VB1H471K	470P 50V	[M]
C7263	ECJ1VB1C104K	0.1 16V	[M]
C7264	ECJ1VB1C104K	0.1 16V	[M]
C7315	ECJ1VB1A224K	0.22 10V	[M]
C7334	ECEA1AKA221I	220 10V	[M]
C7335	ECJ1VF1C104Z	0.1 16V	[M]
C7338	ECJ1VB1A224K	0.22 10V	[M]
C7339	ECJ1VB1H103K	0.01 50V	[M]
C7352	ECJ1VB1H103K	0.01 50V	[M]
C7601	ECEA0JKA330I	33 6.3V	[M]
C7613	ECJ1VB1C104K	0.1 16V	[M]
C7614	ECEA0JKA101I	100 6.3V	[M]
C7625	ECEA0JKA221I	220 6.3V	[M]
C7626	ECJ1VB1C104K	0.1 16V	[M]
C7670	ECJ1VB1C104K	0.1 16V	[M]

23.5. Packing Materials & Accessories Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPGX1340	PACKING CASE	[M] P-S
P1	RPGX1341	PACKING CASE	[M] P-K
P1	RPGX1342	PACKING CASE	[M] PC-K
P2	RPNX0283-1	POLYFOAM	[M]
P3	RPFX0007	MIRAMAT BAG	[M]
		ACCESSORIES	

Ref. No.	Part No.	Part Name & Description	Remarks
A1	N2QAHB000050	REMOTE CONTROL	[M] PC-K, P-K
A1	N2QAHB000051	REMOTE CONTROL	[M] P-S
A1-1	RKK-HTR0283	R/C BATTERY COVER	[M]
A2	K2CB2CB00018	AC CORD	[M] ⚠
A3	RQT7790-P	O/I BOOK (En)	[M]
A3	RQT7791-M	O/I BOOK (Sp)	[M] P-K, P-S
A3	RQT7792-C	O/I BOOK (Cf)	[M] PC-K
A4	RSA0006-L	FM ANTENNA	[M]
A5	N1DAAAA00001	AM LOOP ANTENNA	[M]

23.6. Packaging